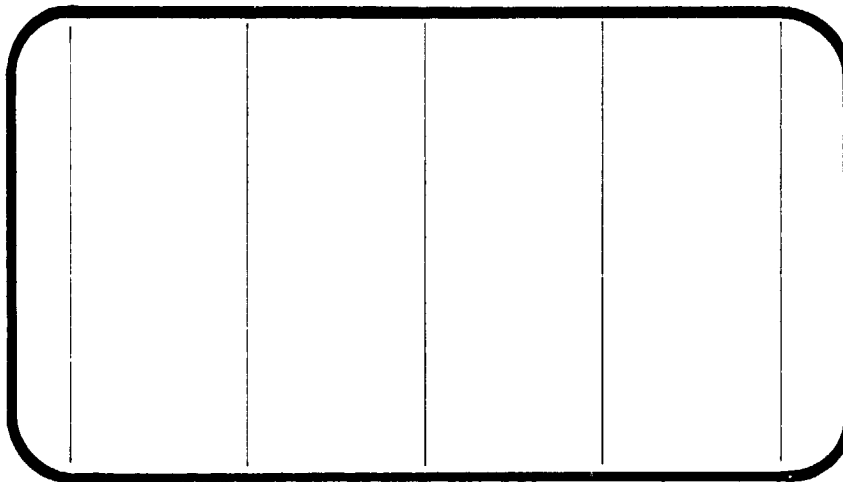




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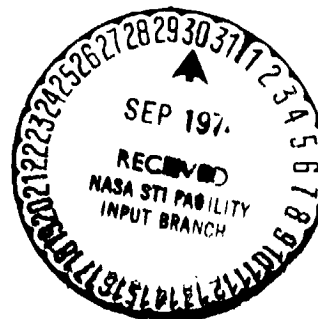
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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT



JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANAGEMENT services

SPACE DIVISION



CHRYSLER  
CORPORATION

July, 1974

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STATIC AND CONTROL INVESTIGATIONS ON AN 0.030-SCALE  
SPACE SHUTTLE ORBITER CONFIGURATION 140A/B MODEL

IN THE AMES RESEARCH CENTER

11- BY 11-FOOT TRANSONIC WIND TUNNEL (0A53A)

VOLUME II of II

by

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Wind Tunnel Operations  
Shuttle Aero Sciences  
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

Data Management Services  
Chrysler Corporation Space Division  
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas



WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 11-747  
NASA Series Number: OA53A  
Model Number: 47-0  
Test Dates: 19 through 27 November 1973  
Occupancy Hours: 160

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STATIC AND CONTROL INVESTIGATIONS ON AN 0.030-SCALE  
SPACE SHUTTLE ORBITER CONFIGURATION 140A/B MODEL

IN THE AMES RESEARCH CENTER

11- BY 11-FOOT TRANSONIC WIND TUNNEL (0A53A)

By M. E. Nichols, Rockwell International Space Division

ABSTRACT

This report presents data obtained from a wind tunnel test of an 0.030-scale model of the Rockwell International Configuration 140A/B Space Shuttle Vehicle Orbiter in the Ames Research Center 11- by 11-Foot Transonic Wind Tunnel. This test was conducted from 19 November to 27 November 1973, in 160 test hours.

This part (part A) of test series 0A53 was conducted at Mach numbers of 0.6, 0.8, 0.9, 1.05, and 1.20, and at Reynolds numbers from  $1.8 \times 10^6/\text{ft}$  to  $6.5 \times 10^6/\text{ft}$ .

The objective of this test was to establish and verify longitudinal and lateral-directional aerodynamic performance, stability, and control characteristics for the Configuration 140A/B SSV Orbiter. Reynolds number studies were performed for certain nominal control-settings. An alternate leading-edge wing configuration and sealed elevon-split arrangement were tested. Bodyflap, elevon, speedbrake, and rudder hinge moments were measured in addition to standard six-component forces and moments and base pressure data. Furthermore, six-component force and moment data were measured for the vertical tail assembly. The model was investigated through angles

of attack from  $-3^{\circ}$  to  $+28^{\circ}$  at  $0^{\circ}$  angle of yaw and through angles of sideslip from  $-5^{\circ}$  to  $+9^{\circ}$  at  $0^{\circ}$ ,  $10^{\circ}$ , and  $20^{\circ}$  angle of pitch.

This report is published in two volumes. Volume I contains Data Figures 4 through 29. Volume II contains Data Figures 30 through 51, and the Tabulated Source Data.

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## SCHEDULE OF COEFFICIENTS PLOTTED:

- (A) CL, CL', CDF, CA, CAF, CAB, CN, CLMFWD, CLMAFT, L/D, XCL/L, versus ALPHA  
CN versus CLMFWD  
CL versus CD
- (B) CL, CD, CDF, CA, CAF, CAB, CN, CLMFWD, CLMAFT, L/D, XCP/L versus ALPHA  
CN versus CLMFWD  
CL versus CD  
DCL, DCD, DCA, DCAF, DCAB, DCN, DCMFWD, DCMAFT versus ALPHA
- (C) CY, CYN, CBL, versus BETA
- (D) CYBETA, CYNBET, CBLBET versus ALPHA

# INDEX OF DATA FIGURES (Concluded)

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- (H) DCY/DS, DCYNDS, DCBLDS, DCLMDS versus BETA
- (I) CHET, CHEI, CHEO versus ALPHA
- (J) CHBF versus ALPHA
- (K) CHR, CHUL, CHLL, CHUR, CHLR versus BETA
- (L) CHSB, CHUL, CHLL, CHUR, CHLR, DCHDSB versus ALPHA
- (M) CYV, CYNV versus AILRON
- (N) CYV, CYNV versus RUDDER
- (O) CYV, CYNV versus BETA
- (P) CHET, CHEI, CHEO versus RUDDER
- (Q) CHBF versus RUDDER
- (R) CHR, CHUL, CHLL, CHUR, CHLR versus AILRON
- (S) CHBF versus AILRON
- (T) CHET, CHEI, CHEO versus ELEV-L
- (U) CHEI, CHEO versus ALPHA
- (V) CHUL, CHLL, CHUR, CHLR versus BETA
- (W) DCY/DA, DCYNDA, DCBLDA, DCLMDA versus ALPHA

# NOMENCLATURE

Symbol	SADSAC Symbol	Definition
Body Axis		
$C_N$	CN	normal-force coefficient
$C_A$	CA	axial-force coefficient
$C_{A_F}$	CAF	forebody axial-force coefficient
$C_m$	CLM	pitching-moment coefficient
$C_Y$	CY	side-force coefficient
$C_n$	CYN	yawing-moment coefficient
$C_l$	CBL	rolling-moment coefficient
Stability Axis (Coefficients utilizing $C_A$ )		
$C_L$	CL	lift coefficient
$C_D$	CD	drag coefficient
$C_m$	CLM	pitching-moment coefficient
$C_{n_s}$	CLN	stability yawing-moment coefficient
$C_{l_s}$	CSL	stability rolling-moment coefficient
Stability Axis (Coefficients utilizing $C_{A_F}$ )		
$C_{L_F}$	CLF	forebody lift coefficient
$C_{D_F}$	CDF	forebody drag coefficient

$C_{m_F}$	CMF	forebody pitching-moment coefficient
L/D	L/D	lift-to-drag ratio
$L_F/D_F$	LF/DF	forebody lift-to-drag ratio
$x_{CP}/l_B$	XCP/L	longitudinal center of pressure location of total vehicle, percent reference body length
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
M	MACH	free-stream Mach number
$P_O$	PO	free-stream static pressure, psia
$P_T$	PT	total pressure, psia
q	Q	free-stream dynamic pressure (psf)
RN/ft	RN/L	unit Reynolds number, per foot
TTAV	TTAV	average total temperature, deg. R

#### Vertical Tail Data

##### Body Axis

$C_{N_V}$	CNV	vertical normal-force coefficient
$C_{A_V}$	CAV	vertical axial-force coefficient
$C_{m_V}$	CMV	vertical pitching-moment coefficient
$C_{Y_V}$	CYV	vertical side-force coefficient
$C_{n_V}$	CYNV	vertical yawing-moment coefficient
$C_{l_V}$	CBLV	vertical rolling-moment coefficient

# Pressure Coefficients and Pressure Corrections

$C_{P_{B_i}}$	CPBI	pressure coefficient for individual base pressures
$C_{P_B}$	CPB	average base pressure coefficient
$C_{P_{SC_j}}$	CPSCJ	pressure coefficient for individual sting-cavity pressures
$C_{P_{SC}}$	CPSC	average sting-cavity pressure coefficient
$C_{A_B}$	CAB	base axial-force coefficient
$C_{A_{SC}}$	CASC	sting-cavity axial-force coefficient

## Hinge Moments

$C_{H_R}$	CHR	rudder hinge-moment coefficient
$C_{H_{E_I}}$	CHEI	inboard elevon hinge-moment coefficient
$C_{H_{E_O}}$	CHEO	outboard elevon hinge-moment coefficient
$C_{H_{E_T}}$	CHET	total elevon hinge-moment coefficient
$C_{H_{UL}}$	CHUL	speedbrake hinge-moment coefficient (upper left)
$C_{H_{LL}}$	CHLL	speedbrake hinge-moment coefficient (lower left)
$C_{H_{UR}}$	CHUR	speedbrake hinge-moment coefficient (upper right)
$C_{H_{LR}}$	CHLR	speedbrake hinge-moment coefficient (lower right)

$C_{H_{BF}}$	CHBF	bodyflap hinge-moment coefficient
$C_{H_{SB}}$	CHSB	total speedbrake hinge-moment coefficient
$C_{P_{V_1}}$	CPV1	pressure coefficient for $P_{V_1}$
$C_{P_{V_2}}$	CPV2	pressure coefficient for $P_{V_2}$
$C_{P_{V_3}}$	CPV3	pressure coefficient for $P_{V_3}$
$C_{P_{V_4}}$	CPV4	pressure coefficient for $P_{V_4}$
$C_{A_{VB}}$	CAVB	vertical tail base axial-force coefficient
$\frac{x_{CPV}}{l_B}$	XCPV/L	longitudinal center-of-pressure location of vertical tail forces
$\frac{z_{CPV}}{l_B}$	ZCPV/L	vertical center-of-pressure location of vertical tail forces
$P_{V_1}, P_{V_2}, P_{V_3}, P_{V_4}$		pressure on vertical tail at stations 1, 2, 3, 4 respectively, psia

NOMENCLATURE (Continued)  
ADDITIONS TO NOMENCLATURE

$C_{mFWD}$	CLMFWD	pitching moment coefficient (FWD C.G.)
$C_{mAFT}$	CLMAFT	pitching moment coefficient (AFT C.G.)
$\delta_{eL}$	ELEV-L	left elevon deflection
$\Delta C_L$	DCL	incremental lift coefficient
$\Delta C_D$	DCD	incremental drag coefficient
$\Delta C_A$	DCA	incremental axial force coefficient
$\Delta C_{A_F}$	DCAF	incremental forebody axial force coefficient
$\Delta C_{A_B}$	DCAB	incremental base axial force coefficient
$\Delta C_N$	DCN	incremental normal force coefficient
$\Delta C_{mFWD}$	DCMFWD	incremental pitching moment coefficient (FWD C.G.)
$\Delta C_{mAFT}$	DCMAFT	incremental pitching moment coefficient (AFT C.G.)
$\Delta C_y$	DCY	incremental side force coefficient
$\Delta C_n$	DCYN	incremental yawing moment coefficient
$\Delta C_\ell$	DCBL	incremental rolling moment coefficient
$C_{y_{\delta_{SB}}}$	DCY/DS	side force coefficient derivative with respect to speed brake deflection. Algebraic difference of the side force coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{n_{\delta_{SB}}}$	DCYNDS	yawing moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the yawing moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree

# NOMENCLATURE (Continued)

$C_{l_{\delta SB}}$	DCBLDS	rolling moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the rolling moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{m_{\delta SB}}$	DCLMDS	pitching moment coefficient derivative with respect to speed brake deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the speed brake angle of the runs; per degree.
$C_{m_{\delta a}}$	DCLMDA	pitching moment coefficient derivative with respect to aileron deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the total aileron deflection angle of the runs; per degree.
$C_{m_{\delta r}}$	DCLMDR	pitching moment coefficient derivative with respect to rudder deflection. Algebraic difference of the pitching moment coefficient of two runs divided by the algebraic difference of the total rudder deflection of the runs; per degree.
$C_{H_{SB\delta}}$	DCHDSB	speed brake hinge moment derivative with respect to speed brake deflection. Algebraic difference of the speed brake hinge moment coefficient of two runs divided by the algebraic difference of the speed brake deflection angle of the runs; per degree.
$\Delta\delta_a$	DA	algebraic difference of aileron deflection angle between two runs; degrees.
$\Delta\delta_e$	DE	algebraic difference of elevon deflection angle between two runs; degrees.
$\Delta\delta_r$	DR	algebraic difference of rudder deflection angle between two runs; degrees.
$\Delta\delta_{BF}$	DBF	algebraic difference of body flap deflection angle between two runs; degrees.
$\delta_a$	AILRON	aileron, total aileron deflection angle, degrees, (left aileron - right aileron)/2.



# NOMENCLATURE (Concluded)

$\delta_{BF}$	BDFLAP	body flap, surface deflection angle; degrees.
$\delta_e$	ELEVON	elevon, surface deflection angle; degrees.
$\delta_r$	RUDDER	rudder, surface deflection angle; degrees.
$\delta_{SB}$	SPDBRK	speedbrake, split rudder inclusive deflection angle between outer surfaces; degrees.

# CONFIGURATION INVESTIGATED

The Rockwell International Configuration 140A/B Space Shuttle Vehicle Orbiter was the subject of the OA53 test series. An 0.030-scale Orbiter model was used. Sealed elevon-split and alternate wing leading-edge investigations were carried out. Various elevon, aileron, bodyflap, speed-brake, and rudder deflections were tested.

The following nomenclature designated model components:

Component	Description
B <sub>26</sub>	140A/B fuselage (VL70-000140A, VL70-000145, VL70-000140B, VL70-000143A, VL70-000139)
C <sub>9</sub>	140A/B basic canopy (VL70-000140A, VL70-000143A)
E <sub>26</sub>	Basic 140A/B elevons (VL70-000200, VL70-006089, VL70-006092)
F <sub>9</sub>	140A/B bodyflap (VL70-000140B, VL70-000200)
M <sub>7</sub>	OMS/RCS pods for 140A/B Orbiter
N <sub>28</sub>	OMS basic nozzles for 140A/B configuration
R <sub>5</sub>	Basic Orbiter rudder (VL70-000146A, VL70-000095)
V <sub>8</sub>	Basic Orbiter vertical tail (VL70-000140A, VL70-000146A)
W <sub>116</sub>	Basic 140A/B wing (VL70-000140B, VL70-000200)
W <sub>121</sub>	Alternate leading-edge wing configuration (VL70-000219, VL70-000200, VL70-006089, VL70-006092)

Reference dimensions and constants for Orbiter data were:

Symbol	Definition	Value
A <sub>B</sub>	(see below for base areas)	0.298472 ft <sup>2</sup>
	$\sum_{i=1}^6 A_{B_i}$	

$A_{SC}$	Sting-cavity area	0.07670 ft <sup>2</sup>
$b_w$	Reference wing span	28.1004 inches
$\bar{c}_w$	Reference MAC	14.244 inches
$\ell_B$	Reference body length (IML)	38.709 inches
$S_w$	Reference wing area	2.4210 ft <sup>2</sup>
$X_{CG}$	Longitudinal length, nose to moment reference center	25.251 inches
$Y_{CG}$	Lateral length, plane of symmetry to moment reference center	0.000 inch
$Z_{CG}$	Vertical length, FRP to moment reference center	-0.750 inch
$\bar{c}_E$	Elevon chord	2.7210 inches
$\bar{c}_R$	Rudder chord	2.2110 inches
$\bar{c}_{SB}$	Speedbrake chord	2.2110 inches
$\bar{c}_{BF}$	Bodyflap chord	2.541 inches
$S_E$	Reference elevon area	0.18900 ft <sup>2</sup>
$S_R$	Reference rudder area	0.090135 ft <sup>2</sup>
$S_{SB}$	Reference speedbrake area	0.090135 ft <sup>2</sup>
$S_{BF}$	Reference bodyflap area	0.12834 ft <sup>2</sup>

Orbiter Base Areas (ft<sup>2</sup>)

$A_{B_1}$  0.050764

$A_{B_2}$  (OMS) 0.087153

$A_{B_3}$  0.033333

$A_{B_4}$  0.060069

$A_{B_5}$  0.028472

$A_{B_6}$  0.038681

## TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan 11- by 11-Foot Transonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 0.6 to 1.4 at Reynolds numbers from  $1.7 \times 10^6/\text{ft}$  to  $9.4 \times 10^6/\text{ft}$ . The test section is 22 feet long, and models are installed on internal strain-gauge balances mounted to sting-type support systems.

Shadowgraph and Schlieren photographic equipment is available, and pressure transducer instrumentation is provided.

Tunnel operating temperature is 580°R. Extended high Reynolds number runs are restricted by power availability.

## DATA REDUCTION

### A. Data Reduction for the Orbiter

Standard ARC methods were used to compute coefficient data.

One set of body- and two sets of stability-axis data are used. The first stability-axis data set has the axial-force coefficient corrected to the base pressure, whereas the second stability-axis data set has the axial-force coefficient corrected to free-stream pressure.

The following outputs are some of those required for data presentation.

Pressure coefficient was computed for each pressure ( $P_{B_i}$ ) as follows:

$$C_{P_{B_i}} = \frac{P_{B_i} - P_o}{q}$$

where

$P_{B_i}$  = pressure at base orifice  $i$

$P_o$  = free-stream static pressure

$q$  = free-stream dynamic pressure

Pressure coefficient was computed for each sting-cavity pressure ( $P_{SC_j}$ ) as follows:

$$C_{P_{SC_j}} = \frac{P_{SC_j} - P_o}{q}$$

where

$P_{SC_j}$  = pressure at sting-cavity orifice  $j$

Average (area-weighted) base pressure coefficient was computed as follows:

$$C_{P_B} = \frac{P_B - P_o}{q}$$

where

$$P_B = \frac{\sum_{i=1}^6 P_{B_i} A_{B_i}}{\sum_{i=1}^6 A_{B_i}}$$

and

6 = number of base pressures

$P_{B_i}$  = pressure at base orifice i

$A_{B_i}$  = area assigned to base orifice i

Average (numerically averaged) sting-cavity pressure coefficient was computed as follows:

$$C_{P_{SC}} = \frac{P_{SC} - P_o}{q}$$

where

$$P_{SC} = \frac{\sum_{j=1}^2 P_{SC_j}}{2}$$

and

2 = number of sting-cavity pressures

$P_{SC_j}$  = pressure at sting-cavity orifice j

Base axial-force coefficient was computed as follows:

$$C_{A_B} = \frac{-[C_{P_B} (A_B) + C_{P_{SC}} (A_{SC})]}{S_w}$$

where

$A_B$  = area of base (total)

$A_{SC}$  = area of sting-cavity

$S_w$  = wing reference area

Sting-cavity axial-force coefficient was computed as follows:

$$C_{A_{SC}} = \frac{-(P_{SC} - P_B) A_{SC}}{q S_w}$$

Axial-force coefficient adjusted to the average (area-weighted) base pressure was computed as follows:

$$C_A = C_{A_U} - C_{A_{SC}}$$

where

$C_{A_U}$  = axial-force coefficient unadjusted for base or sting-cavity pressures

Axial-force coefficient corrected to freestream static pressure (forebody axial-force coefficient) was computed as follows:

$$C_{A_F} = C_{A_U} - C_{A_B}$$

Center-of-pressure location, in percent of reference body length was computed as follows:

$$\frac{x_{CP}}{l_B} = \frac{x_{CG} - \frac{C_m \bar{c}_w}{C_N}}{l_B}$$

where

$x_{CG}$  = center-of-gravity location aft of model nose

$l_B$  = reference body length

Lift-to-drag ratios, based on each of the two sets of stability axis data were computed as follows:

$$\frac{L}{D} = \frac{C_L}{C_D}, \text{ based on } C_A$$



$$\frac{L_F}{C_F} = \frac{C_{L_F}}{C_{D_F}}, \text{ based on, } C_{A_F}$$

Rudder hinge-moment coefficient was computed as follows:

$$C_{H_R} = \frac{HM_R}{q S_R \bar{c}_R}$$

where

$$HM_R = HM_{SB_{UL}} + HM_{SB_{LL}} - HM_{SB_{UR}} - HM_{SB_{LR}}$$

Inboard-elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_I}} = \frac{HM_{E_I}}{q S_E \bar{c}_E}$$

Outboard-elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_O}} = \frac{HM_{E_O}}{q S_E \bar{c}_E}$$

Total elevon hinge-moment coefficient was computed as follows:

$$C_{H_{E_T}} = C_{H_{E_I}} + C_{H_{E_O}}$$

Speedbrake hinge-moment coefficient was computed as follows:

$$C_{H_{SB_k}} = \frac{HM_{SB_k}}{q S_{SB} \bar{c}_{SB}}$$

where k = two upper and two lower speedbrake panels

Bodyflap hinge-moment coefficient was computed as follows:

$$C_{H_{BF}} = \frac{HM_{BF}}{q S_{BF} \bar{c}_{BF}}$$

## B. Data Reduction for Vertical Tail Instrumentation

Standard ARC methods were used to compute six-component data.

The data were reduced to coefficient form using the wing area ( $S_w$ ), wing chord ( $\bar{c}_w$ ), and wing span ( $b_w$ ). Moments were determined about the balance center, and then transferred to the model C.G.

Pressure coefficients were computed for vertical base pressures,  $P_{V_1}$  and  $P_{V_2}$  as follows:

$$C_{P_{V_{1,2}}} = \frac{P_{V_{1,2}} - P_o}{q}$$

Pressure coefficients were computed for vertical cavity pressures,  $P_{V_3}$  and  $P_{V_4}$  as follows:

$$C_{P_{V_{3,4}}} = \frac{P_{V_{3,4}} - P_o}{q}$$

Vertical tail base axial-force correction was computed as follows:

$$C_{A_{V_B}} = \frac{-(C_{P_{V_2}} - C_{P_{V_3}}) A_{V_2} + C_{P_{V_1}} A_{V_1}}{S_w}$$

Vertical tail axial-force coefficient corrected to freestream pressure was computed as follows:

$$C_{A_V} = C_{A_{V_U}} - C_{A_{V_B}}$$

where

$C_{A_{V_U}}$  = vertical tail axial-force coefficient  
unadjusted for base pressures

Center-of-pressure locations on the vertical tail were computed as follows:

$$x_{CP_V} = x_{CG} - \frac{C_{n_{VBODY}} b_w}{C_{Y_{VBODY}}}$$

(where "BODY" means "body-axis")

$$z_{CP_V} = z_{CG} + \frac{C_{l_{VBODY}} b_w}{C_{Y_{VBODY}}}$$

Pressure coefficient for each extra "monitoring" pressure ( $P_{X_i}$ ) was computed as follows:

$$C_{P_{X_i}} = \frac{P_{X_i} - P_o}{q}$$

Reference dimensions and constants for the vertical tail were:

<u>Symbol</u>	<u>Comments</u>	<u>Value</u>
$A_{V_1}$	See figures	0.00625 ft <sup>2</sup>
$A_{V_2}$	See figures	0.01326 ft <sup>2</sup>
$S_w$	Given in previous section	
$b_w$	Given in previous section	
$l_B$	Given in previous section	
$x_{CG}$	Given in previous section	
$z_{CG}$	Given in previous section	

## REFERENCES

1. Rockwell International Space Division Technical Report No. SD73-SH-0276: "Pretest Information for Tests of the 0.030-Scale Space Shuttle Orbiter Force Model 47-0 in the NASA/Ames 11- by 11-Foot, 9- by 7-Foot, and 8- by 7-Foot Unitary Plan Wind Tunnel (OA53A,B,C)", by M. D. Milam, E. Chee, and M. E. Nichols, 19 October 1973.
2. Rockwell International Space Division Internal Letter No. SAS/WT0/73-205: "Model Design Requirements for the 0.030-scale Pressure/Loads Model 47-OTS", 20 June 1973.
3. NASA-CR-134, 119 (DMS-DR-2178); "Investigations on an 0.030-Scale Space Shuttle Vehicle Configuration 140A/B Orbiter Model in the Ames Research Center 9-by 7-foot Supersonic Wind Tunnel (OA53B)," by M. D. Milam, E. Chee, and M. E. Nichols, July 1974.
4. NASA-CR-134, 120 (DMS-DR-2185); "Investigations on an 0.030-Scale Space Shuttle Vehicle Configuration 140A/B Orbiter Model in the Ames Research Center Unitary Plan 8-by 7-foot Supersonic Wind Tunnel (OA53C)," by M. D. Milam, E. Chee, and M. E. Nichols, July 1974.

TABLE I.

TEST : OA53A		DATE : 11/16/73	
TEST CONDITIONS			
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. inch)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.60	$1.79 \times 10^6/\text{ft}$	1.45	120
0.60	$3.00 \times 10^6/\text{ft}$	2.46	120
0.60	$3.96 \times 10^6/\text{ft}$	3.33	120
0.60	$6.47 \times 10^6/\text{ft}$	5.44	120
0.80	$2.10 \times 10^6/\text{ft}$	2.16	120
0.80	$2.97 \times 10^6/\text{ft}$	3.09	120
0.80	$4.23 \times 10^6/\text{ft}$	4.46	120
0.80	$5.46 \times 10^6/\text{ft}$	5.77	120
0.90	$2.19 \times 10^6/\text{ft}$	2.49	120
0.90	$2.98 \times 10^6/\text{ft}$	3.38	120
0.90	$3.75 \times 10^6/\text{ft}$	4.28	120
0.90	$4.77 \times 10^6/\text{ft}$	5.50	120
1.05	$2.30 \times 10^6/\text{ft}$	2.96	120
1.05	$3.00 \times 10^6/\text{ft}$	3.73	120
1.05	$3.50 \times 10^6/\text{ft}$	4.38	120
1.05	$4.51 \times 10^6/\text{ft}$	5.63	120

BALANCE UTILIZED: 2.5" Mk XX

	CAPACITY:	ACCURACY:	COEFFICIENT TOLERANCE:
NF	<u>3000 lb</u>	<u>                    </u>	<u>                    </u>
NA	<u>3000 lb</u>	<u>                    </u>	<u>                    </u>
SF	<u>1500 lb</u>	<u>                    </u>	<u>                    </u>
SA	<u>1500 lb</u>	<u>                    </u>	<u>                    </u>
R	<u>4000 in-lb</u>	<u>                    </u>	<u>                    </u>
X	<u>600 lb</u>	<u>                    </u>	<u>                    </u>

COMMENTS:

TABLE I. - Concluded.

[illegible]

TABLE II

TEST: 11-747		QA53A		DATA SET RUN NUMBER COLLATION SUMMARY										DATE: Nov 19-27, 1973		
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES		RM/L	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
		$\alpha$	$\beta$	$\delta$	$\delta R$		0.6	0.8	0.9	1.05	1.2	TEST RUN NUMBER				
REJ002	BCMFV, V	B	0	0	22.5 25 0	NOM	114	113	112	110	109					
03				-10	-11.7		14	163	162	161	160					
04				115			119	118	117	116	115					
05				5.5			159	158	157	156	155					
06				-5			103	107	106	105	104					
07				-15			297	293	292	291	290					
08				15	16.3	HI	295	296	297	298	299					
09						NOM	304	303	302	301	300					
10				0		NOM	309	308	307	306	305					
11							134	138	137	136	135					
12				-11.7			154	149	148	143	140					
13							153	150	147	144	141					
14							152	151	146	145	142					
15				0		LO	324	319	318	313	312					
16						NOM	323	320	317	314	311					
17						HI	322	321	316	315	310					
18				-20	-11.7	LO	339	334	333	328	327					

NOTE: FOR COEFFICIENTS RECORDED SEE DATASETS IN APPENDIX VOL II

$\alpha$  OR  $\beta$  SCHEDULES

$d(B) = -1.25, 0, 1.5, 3.5, 5.5, 7.5, 9.5, 12.5, 15.5, 18.5, 21.5, 24.5, 28.3, 0$

$\beta(B) = -5, -3, -1, 0, 1, 3, 5, 7, 9$

COEFFICIENTS

BCMFV, V = B<sub>20</sub>C<sub>4</sub>M<sub>17</sub>W<sub>16</sub>V<sub>9</sub>R<sub>5</sub>E<sub>20</sub>N<sub>28</sub>

BCMFV<sub>2</sub>V = B<sub>20</sub>C<sub>4</sub>M<sub>17</sub>W<sub>16</sub>V<sub>9</sub>R<sub>5</sub>E<sub>20</sub>N<sub>28</sub>

TABLE II - Continued.

TEST: 11-747										DATA SET RUN NUMBER COLLATION SUMMARY										DATE: NOV 19-37 1973																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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19		BCMF <sub>W1</sub> V		B	0	-20	-11.7	25	0	NOM		338	335	332	324	326																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															



TABLE II - Continued.

[illegible]

TABLE II - Concluded.

[illegible]

TABLE III. - MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B26

GENERAL DESCRIPTION : Orbiter fuselage configuration 140A/B

NOTE: B26 identical to B24 except underside of fuselage refaired to accept W116.

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000139, VL70-000140A, VL70-000140B, VL70-000143A, VL70-000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Body Fwd Sta $X_o=235$ ) - In.	<u>1293.3</u>	<u>38.799 (OML)</u>
Max Width (@ $X_o = 1520$ ) - In.	<u>262.0</u>	<u>7.860</u>
Max Depth (@ $X_o = 1464$ ) - In.	<u>250.0</u>	<u>7.500</u>
Fineness Ratio	<u>0.26357</u>	<u>0.26357</u>
Area - Ft <sup>2</sup>	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>340.88462</u>	<u>0.30679</u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : CANOPY - C<sub>0</sub>

GENERAL DESCRIPTION : Configuration 140 A/B orbiter fuselage canopy

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140A, VL70-000143A

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ( $X_0 = 434.643$ to $578$ )-In.	<u>143.357</u>	<u>4.30071</u>
Max Width (@ $X_0 = 513.12'$ )	<u>152.412</u>	<u>4.57236</u>
Max Depth (@ $X_0 = 485.0$ )	<u>25.000</u>	<u>0.75000</u>
Fineness Ratio	<u>                    </u>	<u>                    </u>
Area	<u>                    </u>	<u>                    </u>
Max. Cross-Sectional	<u>                    </u>	<u>                    </u>
Planform	<u>                    </u>	<u>                    </u>
Wetted	<u>                    </u>	<u>                    </u>
Base	<u>                    </u>	<u>                    </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: ELEVON - E<sub>26</sub>

GENERAL DESCRIPTION: Configuration 140A/B Orbiter Elevons

Data for one side.

MODEL SCALE: 0.030

MODEL DRAWING 33-600148, RELEASE 6

DRAWING NUMBER: VI70-000200, VI70-006089, VI70-006092

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>210.0</u>	<u>0.1890</u>
Span (equivalent) - In.	<u>349.2</u>	<u>10.476</u>
Inb'd equivalent chord - In.	<u>118.004</u>	<u>3.540</u>
Outb'd equivalent chord - In.	<u>55.192</u>	<u>1.656</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees		
Leading Edge	<u>0.00</u>	<u>0.00</u>
Tailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
Hingeline	<u>0.00</u>	<u>0.00</u>
Area Moment (Normal to hinge line) Ft <sup>3</sup>	<u>1587.25</u>	<u>0.005670</u>
Mean Aerodynamic Chord - In.	<u>90.70</u>	<u>2.721</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : OMS PODS - M<sub>7</sub>

GENERAL DESCRIPTION : Configuration 140 A/B OMS Pods

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140A, VL70-000145

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta. $X_0 = 1233.0$ (In.))	<u>327.000</u>	<u>9.810</u>
Max Width (@ $X_0 = 1450.0$ ) - In.	<u>94.5</u>	<u>2.8350</u>
Max Depth (@ $X_0 = 1493.0$ ) - In.	<u>109.000</u>	<u>3.270</u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT : BODY FLAP - F<sub>9</sub>

GENERAL DESCRIPTION : Configuration 140 A/B body flap

\_\_\_\_\_

\_\_\_\_\_

MODEL SCALE: 0.030

DRAWING NUMBER : VL70-000140B, VL70-000200

DIMENSIONS	FULL SCALE	MODEL SCALE
Length - In.	<u>84.7</u>	<u>2.541</u>
Max Width - In.	<u>262.308</u>	<u>7.86924</u>
Max Depth - In.	<u>24.000</u>	<u>0.69000</u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area - Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>158.85350</u>	<u>0.14297</u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>41.89642</u>	<u>0.03771</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: NOZZLES - N<sub>28</sub>

GENERAL DESCRIPTION: Configuration 140 A/B OMS

MODEL SCALE: 0.030

DRAWING NO.: VL70-000140A

DIMENSIONS:	<u>FULL SCALE</u>	<u>MODEL SCALE</u>
Gimbal Origin		
Fuselage Sta. - In.		
X	<u>1518</u>	<u>45.54</u>
Y	<u>+ 88.0</u>	<u>2.64</u>
Z	<u>492.0</u>	<u>14.76</u>
Null Position		
Pitch	<u>15°49'</u>	<u>15°49'</u>
Yaw	<u>12°17'</u>	<u>12°17'</u>
Gimbal Range		
Pitch		
Outboard	<u>± 8°</u>	<u>± 8°</u>
Yaw		
Outboard	<u>13°17'</u>	<u>13°17'</u>
Inboard	<u>2°30'</u>	<u>2°30'</u>



TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: RUDDER - R<sub>5</sub>GENERAL DESCRIPTION: 140 A/B configuration per Rockwell LinesVL70-000095.MODEL SCALE: 0.030DRAWING NUMBER: VL70-000095, VL70-000146A

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area - Ft <sup>2</sup>	<u>106.38</u>	<u>0.09574</u>
Span (equivalent) - In.	<u>201.0</u>	<u>6.0300</u>
Inb'd equivalent chord - In.	<u>91.585</u>	<u>2.74755</u>
Outh'd equivalent chord - In.	<u>50.833</u>	<u>1.52499</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outh'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line) Ft <sup>3</sup>	<u>526.13</u>	<u>0.01420</u>

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: VERTICAL - V<sub>8</sub>

GENERAL DESCRIPTION: Configuration 140 A/B vertical tail.

NOTE: Similar to V5 with radius on T.E. upper corner and L.E. lower corner where vertical meets fuselage.

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140A, VL70-000146A

DIMENSIONS:	FULL SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) - Ft <sup>2</sup>		
Planform	413.253	0.37193
Span (Theo) - In.	315.720	9.46160
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	0.40399	0.40399
Sweep-Back Angles - Degrees		
Leading Edge	45.00	45.00
Trailing Edge	25.947	25.947
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.500	8.05500
Tip (Theo) WP	108.470	3.25410
MAC	199.80756	5.99423
Fus. Sta. of .25 MAC	1463.50	43.9050
W.P. of .25 MAC	635.522	19.06566
B.L. of .25 MAC		
Airfoil Section		
Leading Wedge Angle - Deg.	10.00	10.00
Trailing Wedge Angle - Deg.	14.920	14.920
Leading Edge Radius (Min.) - In.	2.00	0.060
Void Area	13.17	0.01185
Blanketed Area	0.0	0.0

TABLE III. - MODEL DIMENSIONAL DATA - Continued.

MODEL COMPONENT: WING-W<sub>116</sub>GENERAL DESCRIPTION: Configuration 140 A/B basic wing.NOTE: Identical to W114 except airfoil thickness. Dihedral angle is  
given for trailing edge of wing.MODEL SCALE: 0.030

TEST NO.

DWG. NO. VL70-000140B  
VL70-000200

DIMENSIONS:

FULL-SCALE

MODEL SCALE

## TOTAL DATA

Area (Theo.) - Ft<sup>2</sup>

Planform

2690.00

2.4210

Span (Theo.)-In.

936.6816

28.10045

Aspect Ratio

2.265

2.265

Rate of Taper

1.177

1.177

Taper Ratio

0.200

0.200

Dihedral Angle, degrees

3.500

3.500

Incidence Angle, degrees

0.500

0.500

Aerodynamic Twist, degrees

+3.00

+3.000

Sweep Back Angles, degrees

Leading Edge

45.00

45.00

Trailing Edge

- 10.056

- 10.056

0.25 Element Line

35.209

35.209

Chords:

Root (Theo) B.P.O.O.

689.2429

20.67729

Tip, (Theo) B.P.

137.8486

4.13546

MAC

474.8117

14.24435

Fus. Sta. of .25 MAC

1126.721

33.80163

W.P. of .25 MAC

291.00

8.73000

B.L. of .25 MAC

187.33491

4.62005

## EXPOSED DATA

Area (Theo) - Ft<sup>2</sup>

1812.2205

1.63010

Span, (Theo) - In. BP108

736.6816

22.10045

Aspect Ratio

2.058

2.058

Taper Ratio

0.2451

0.2451

Chords

Root BP108

570.6230

17.11869

Tip 1.00  $\frac{b}{2}$ 

137.8512

4.13554

MAC

354.2376

10.62713

Fus. Sta. of .25 MAC

1164.237

34.92711

W.P. of .25 MAC

292.00

8.76000

B.L. of .25 MAC

239.67786

7.19034

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{b}{2}$  =

0.113

0.113

Tip  $\frac{b}{2}$  =

0.12

0.12

Data for (1) of (2) Sides

Leading Edge Cuff  $\frac{2}{2}$ Planform Area Ft<sup>2</sup>

79.13389

0.10650

Leading Edge Intersects Fus M. L. @ Sta

505.0

15.15000

Leading Edge Intersects Wing @ Sta

1084.5

30.10500

TABLE III. - MODEL DIMENSIONAL DATA - Concluded.

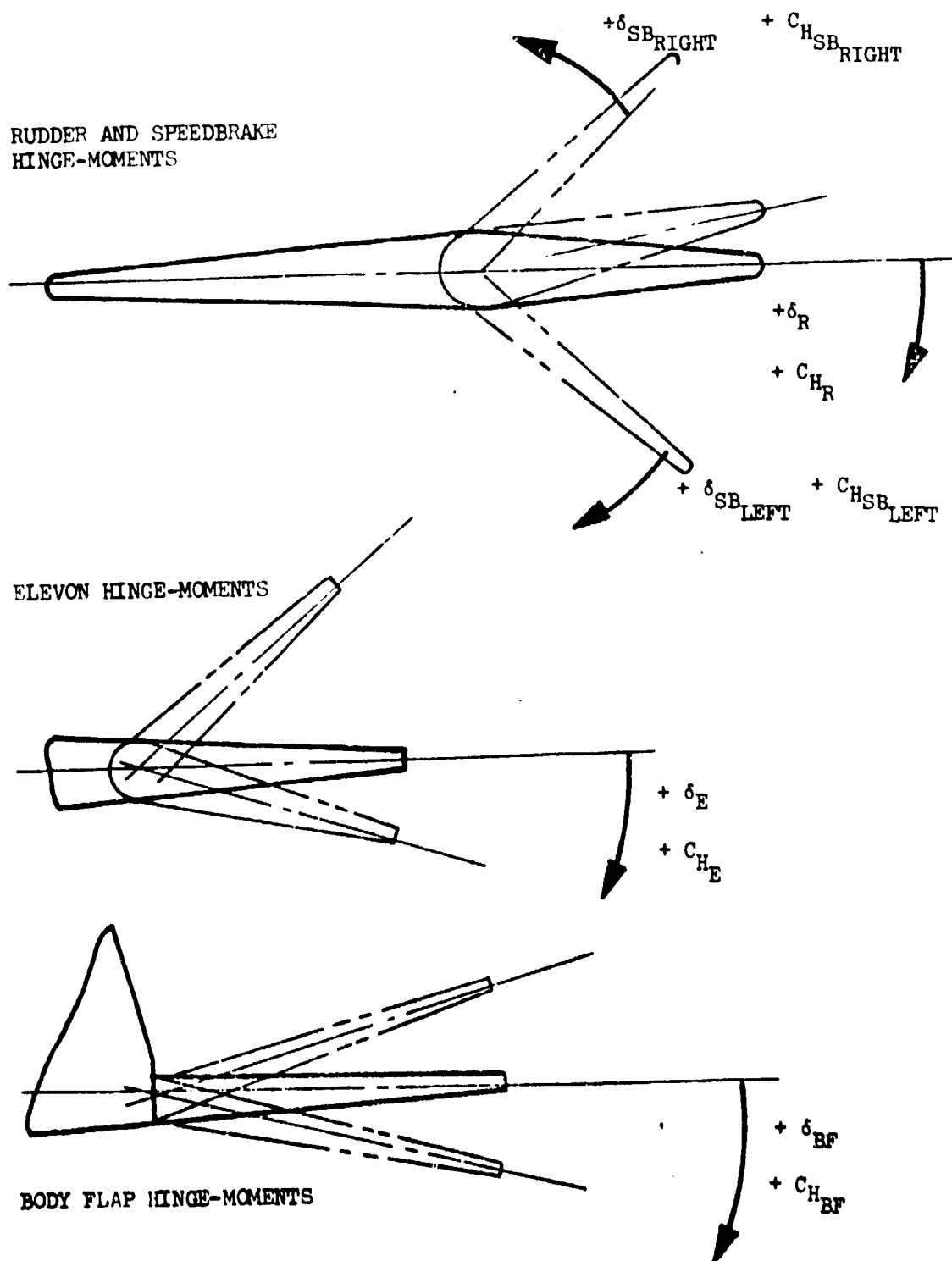
MODEL COMPONENT: <u>WING-W<sub>121</sub></u>		
GENERAL DESCRIPTION: <u>Identical to W<sub>121</sub> except for modified leading edge as shown on Figure 2c.</u>		
MODEL SCALE: <u>0.030</u>		
TEST NO.	DWG. NO. <u>VL70-000200, -006089,</u> <u>-000219, -006092</u>	
DIMENSIONS:	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
TOTAL DATA		
Area (Theo.) Ft <sup>2</sup>		
Planform	<u>2600.0</u>	<u>2.421</u>
Span (Theo) In.	<u>936.682</u>	<u>28.100</u>
Aspect Ratio	<u>2.265</u>	<u>2.265</u>
Rate of Taper	<u>1.177</u>	<u>1.177</u>
Taper Ratio	<u>0.200</u>	<u>0.200</u>
Dihedral Angle, degrees	<u>3.500</u>	<u>3.500</u>
Incidence Angle, degrees	<u>0.500</u>	<u>0.500</u>
Aerodynamic Twist, degrees	<u>+ 3.000</u>	<u>+ 3.000</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>- 10.056</u>	<u>- 10.056</u>
0.25 Element Line	<u>35.209</u>	<u>35.209</u>
Chords:		
Root (Theo) B.P.0.0.	<u>689.243</u>	<u>20.677</u>
Tip, (Theo) B.P.	<u>137.849</u>	<u>4.135</u>
MAC	<u>474.812</u>	<u>14.244</u>
Fus. Sta. of .25 MAC	<u>1126.721</u>	<u>33.802</u>
W.P. of .25 MAC	<u>291.00</u>	<u>8.730</u>
B.L. of .25 MAC	<u>187.335</u>	<u>5.620</u>
EXPOSED DATA		
Area (Theo) Ft <sup>2</sup>		
Span, (Theo) In. BP108	<u>1812.221</u>	<u>1.631</u>
Aspect Ratio	<u>736.682</u>	<u>22.100</u>
Taper Ratio	<u>2.058</u>	<u>2.058</u>
Chords	<u>0.245</u>	<u>0.245</u>
Root BP108	<u>570.623</u>	<u>1.631</u>
Tip 1.00 $\frac{b}{2}$	<u>137.851</u>	<u>4.136</u>
MAC	<u>354.238</u>	<u>10.627</u>
Fus. Sta. of .25 MAC	<u>1164.227</u>	<u>35.077</u>
W.P. of .25 MAC	<u>292.0</u>	<u>8.760</u>
B.L. of .25 MAC	<u>239.678</u>	<u>7.190</u>
Airfoil Section (Rockwell Mod NASA)		
XXXX-64		
Root $\frac{b}{2}$ =	<u>0.113</u>	<u>0.113</u>
Tip $\frac{b}{2}$ =	<u>0.12</u>	<u>0.12</u>
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft <sup>2</sup>	<u>79.13389</u>	<u>0.0712</u>
Leading Edge Intersects Fus M. L. @ Sta	<u>505.0</u>	<u>15.150</u>
Leading Edge Intersects Wing @ Sta	<u>1084.5</u>	<u>32.535</u>

**Notes:**

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

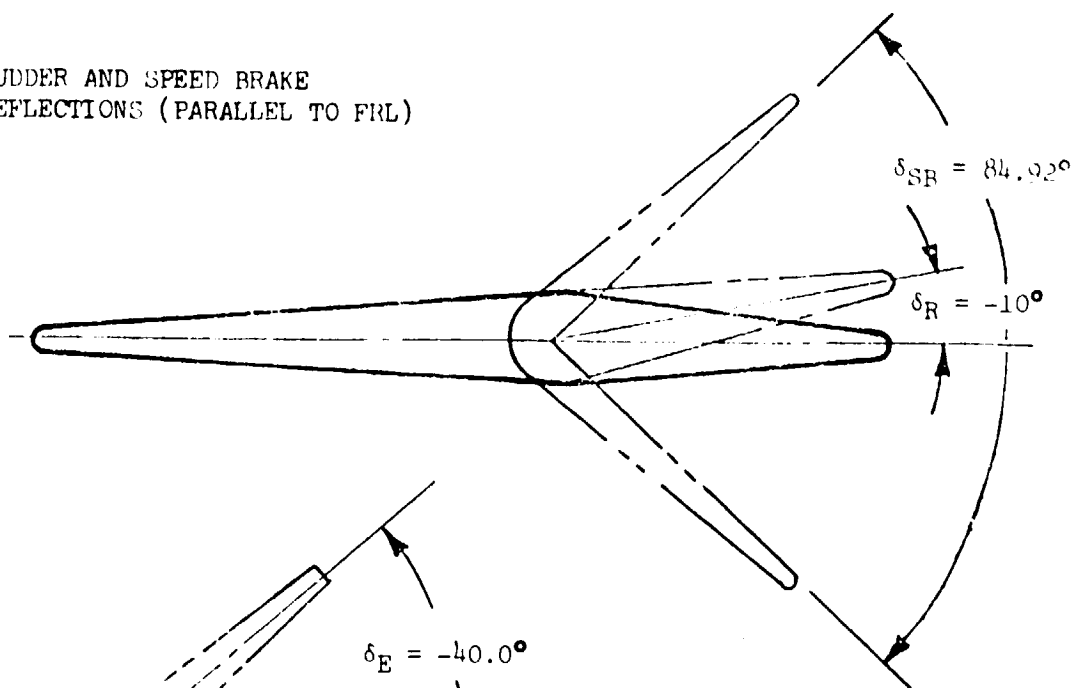
- 
- Notes:
1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
  2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. - Axis systems.

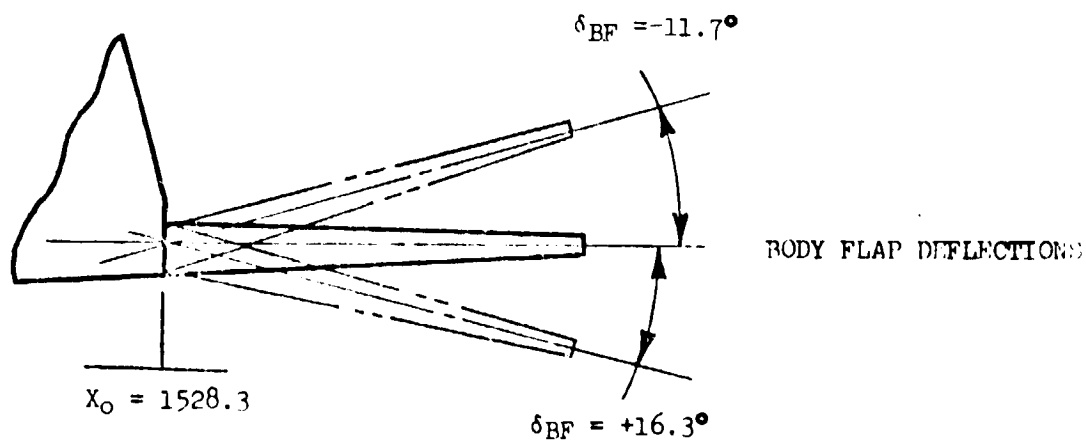
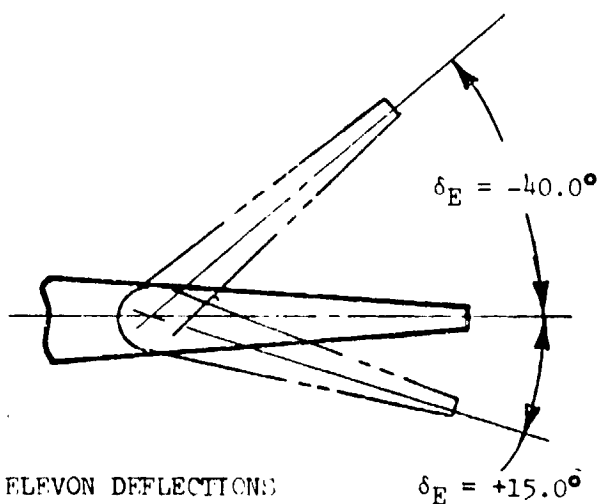


b. Definition of Hinge-Moment Directions  
Figure 1. - Continued

RUDDER AND SPEED BRAKE  
DEFLECTIONS (PARALLEL TO FRL)



ELEVON DEFLECTIONS



c. Definition of Angular Measurements

Figure 1. - Concluded.

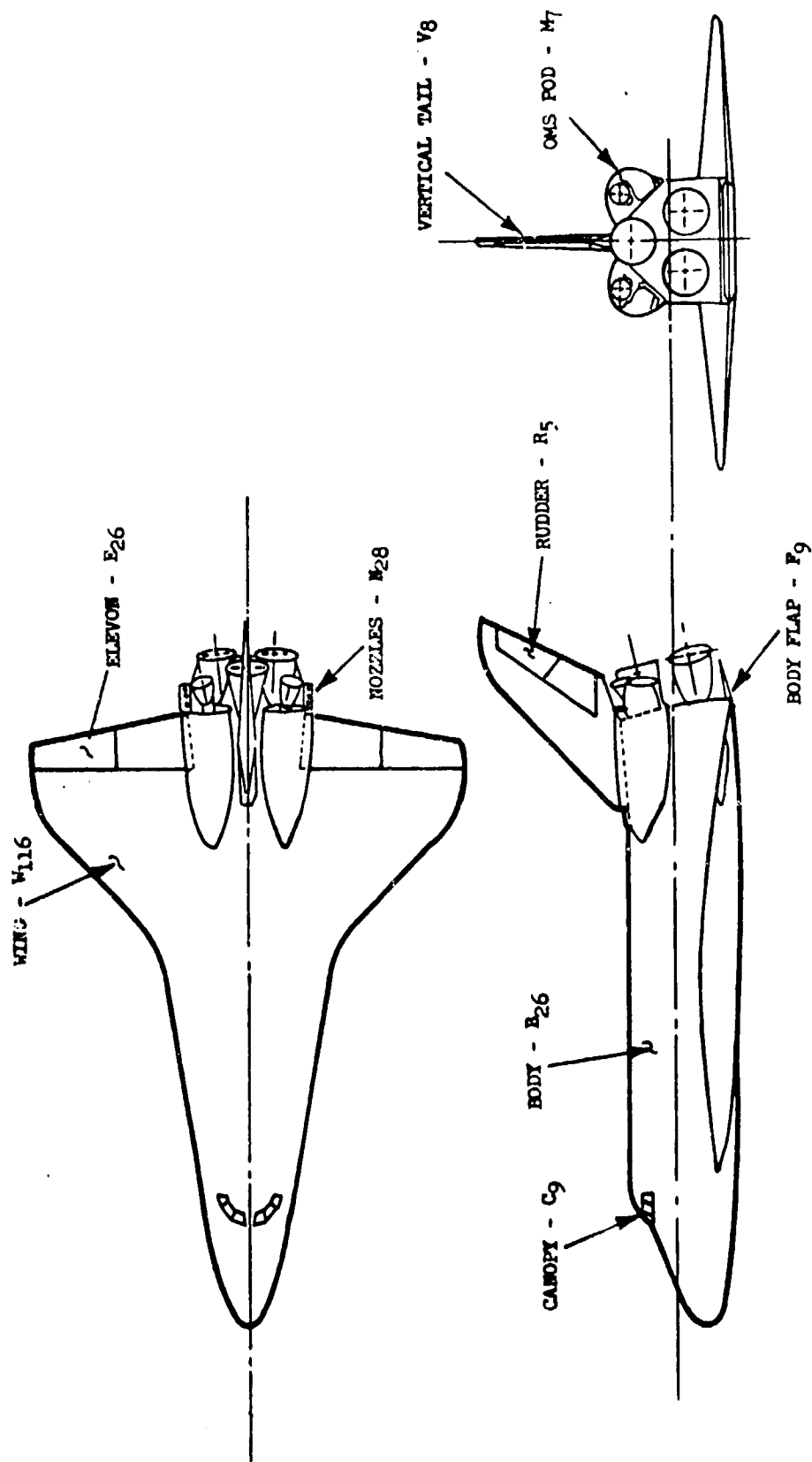


Figure 2. - Model sketches.

a. Configuration 140 A/B





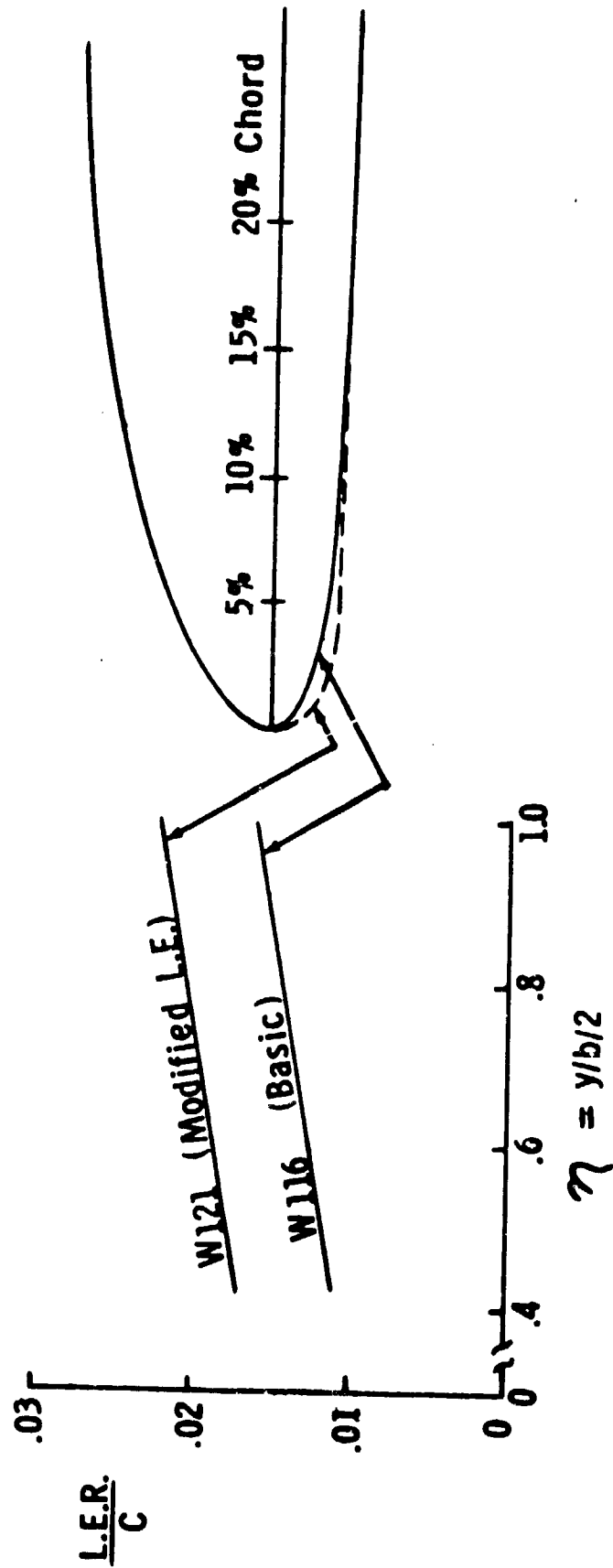
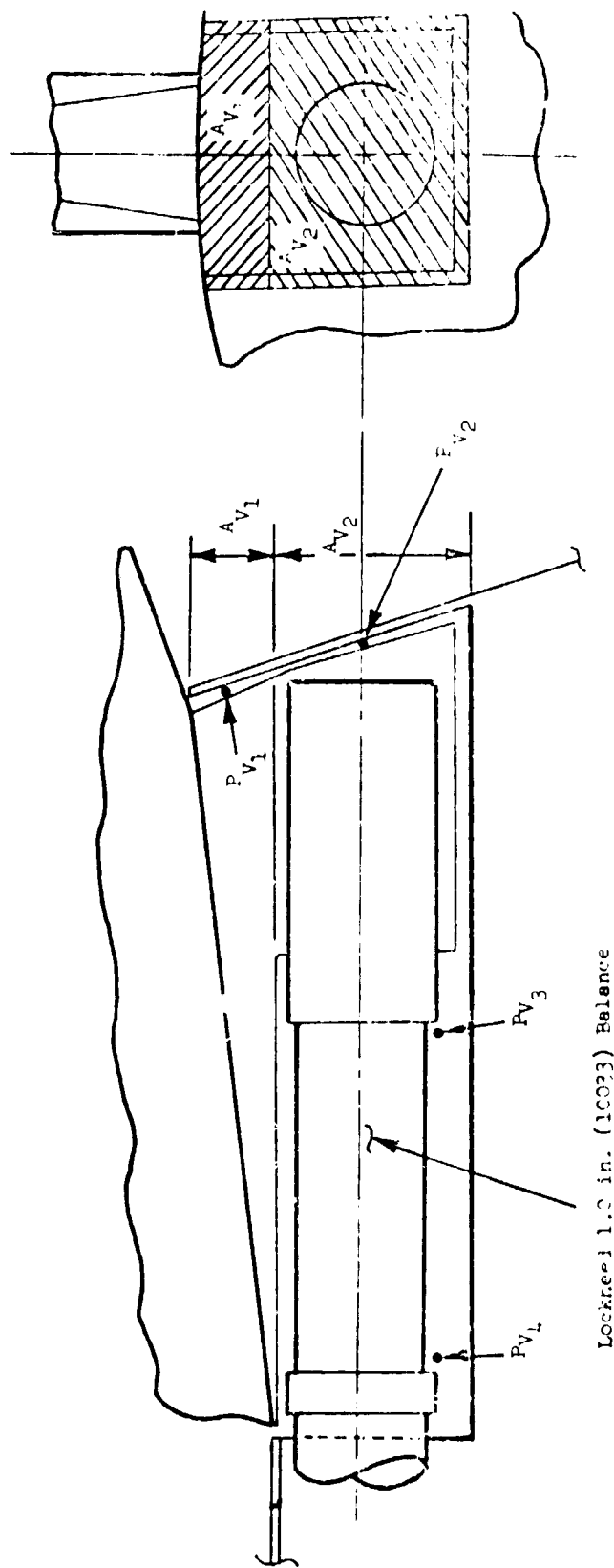
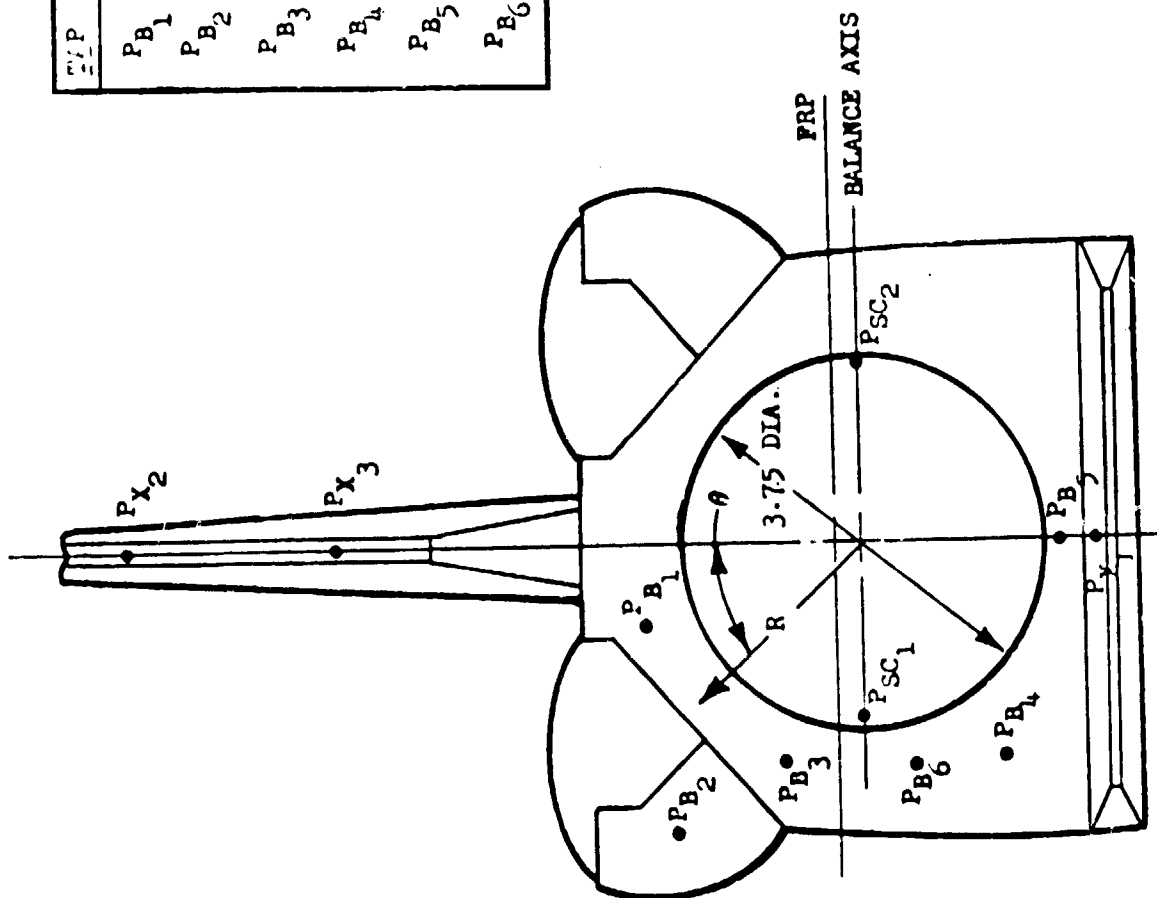


Figure 2. - Concluded.  
c. Wing Leading-Edge Modifications



a. Vertical Balance Pressure Cell Location

Figure 3. - Pressure instrumentation.

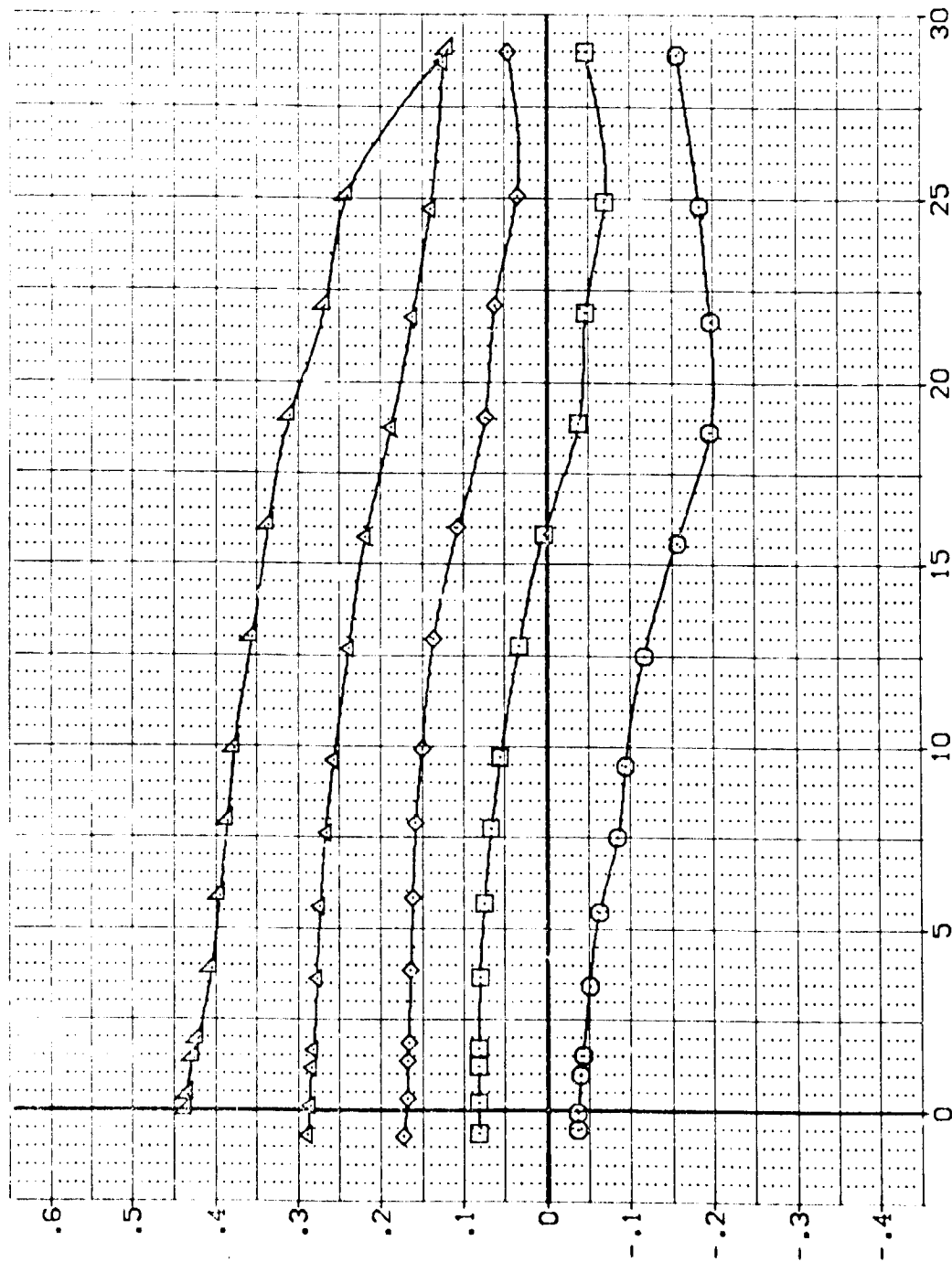


$\theta$	$R$
$P_{B1}$	2.60
$P_{B2}$	CENTROID
$P_{B3}$	2.60
$P_{B4}$	3.30
$P_{B5}$	2.30
$P_{B6}$	2.85

b. Basic Pressure Orifice Locations  
Figure 3. - Concluded.

DATA FIGURES

DATA SET SYMB.	CONFIG	DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[YE4003]	ARC 11-747	QAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE4001]	ARC 11-747	QAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YE4002]	ARC 11-747	QAS3A B C M F VI V	-10.000	.000	-11.700	25.000	EXREF 28.1004 IN.
[YE4019]	ARC 11-747	QAS3A B C M F VI V	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
[YE4023]	ARC 11-747	QAS3A B C M F VI V	-40.000	.000	-11.700	25.000	YREF 11.0000 IN.
							ZREF 11.0000 IN.
							SCALE .0000



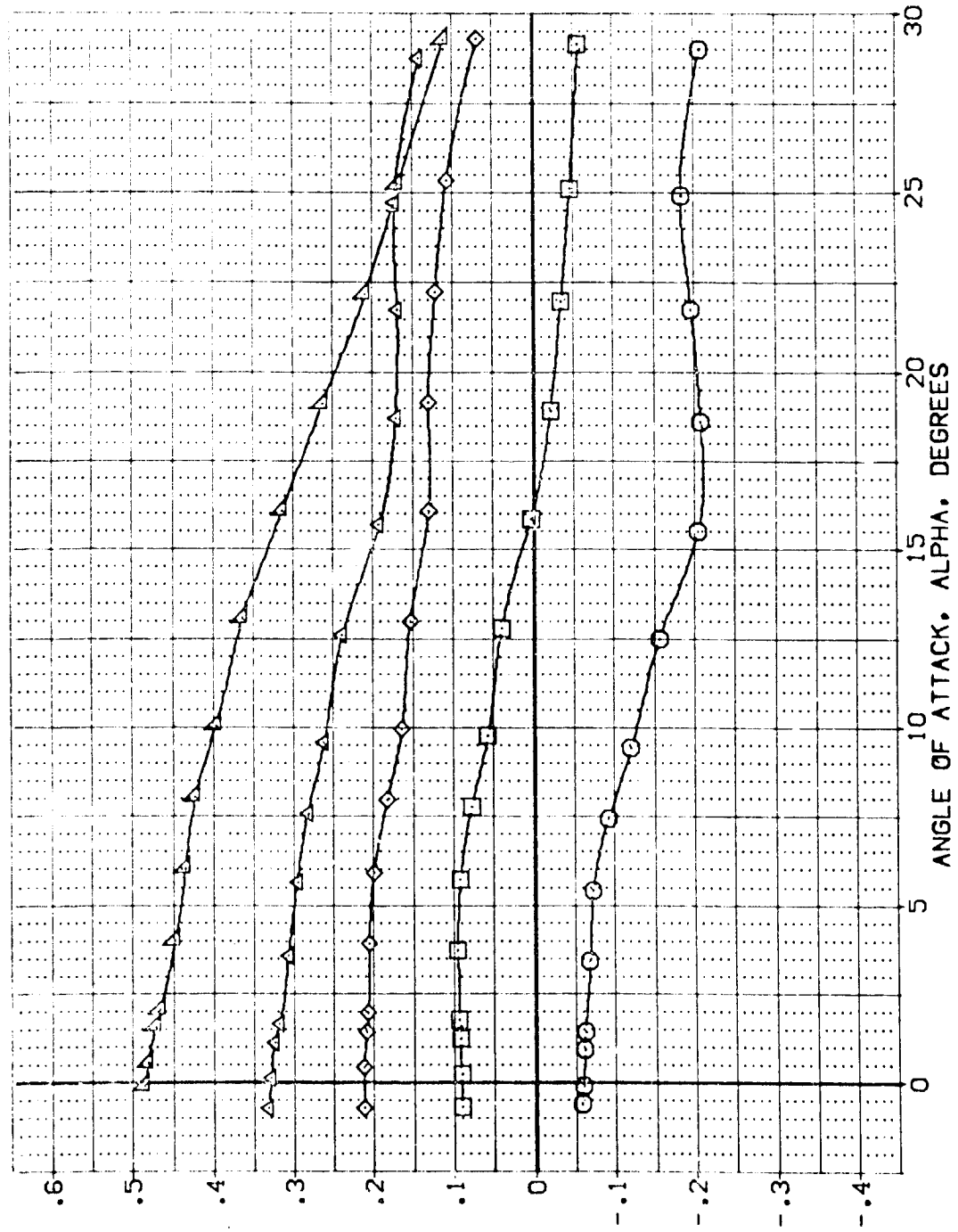
TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 30 ELEVON HINGE MOMENTS

(A)MACH = .60

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DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPDRK	REFERENCE INFORMATION
(YE4003)	□	ARC	11-7-7 Q453A B C M F V	15.000	.000	-11.700	25.000	SREF 2.4210 S2.FT.
(YE4011)	△	ARC	11-7-7 Q453A B C M F V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YE4002)	◇	ARC	11-7-7 Q453A B C M F V	-10.000	.000	-11.700	25.000	LREF 20.1004 IN.
(YE4019)	□	ARC	11-7-7 Q453A B C M F V	-20.000	.000	-11.700	25.000	LREF 32.0310 IN.
(YE4023)	○	ARC	11-7-7 Q453A B C M F V	-40.000	.000	-11.700	25.000	LREF 11.7000 IN.
								SCALE .0500



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 30 ELEVON HINGE MOMENTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
[YEF003]	ARC 11-747 BA53A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
[YEF011]	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YEF002]	ARC 11-747 BA53A B C M F V1 V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[YEF019]	ARC 11-747 BA53A B C M F V1 V	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
[YEF023]	ARC 11-747 BA53A B C M F V1 V	-40.000	.000	-11.700	25.000	YREF 11.2500 IN.
						ZREF .0000
						SCALE .0000

TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

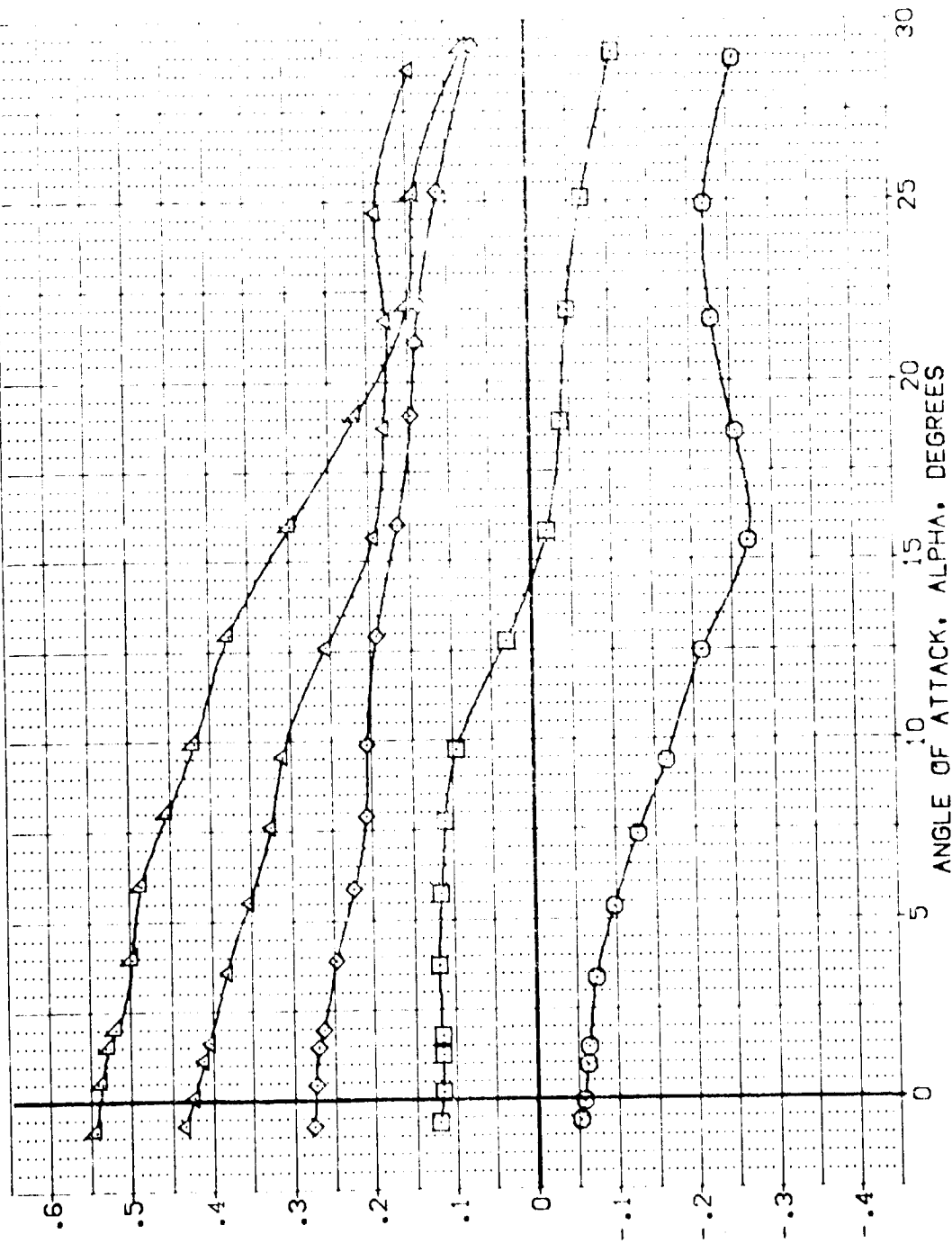


FIG. 30 ELEVON HINGE MOMENTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(VE-003)	ARC 11-747 C-53A B C H F V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VE-011)	ARC 11-747 C-53A B C H F V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(VE-002)	ARC 11-747 C-53A B C H F V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(VE-019)	ARC 11-747 C-53A B C H F V	-20.000	.000	-11.700	25.000	MREF 32.0010 IN.
(VE-023)	ARC 11-747 C-53A B C H F V	-40.000	.000	-11.700	25.000	YREF 11.2000 IN.
						SCALE .0300

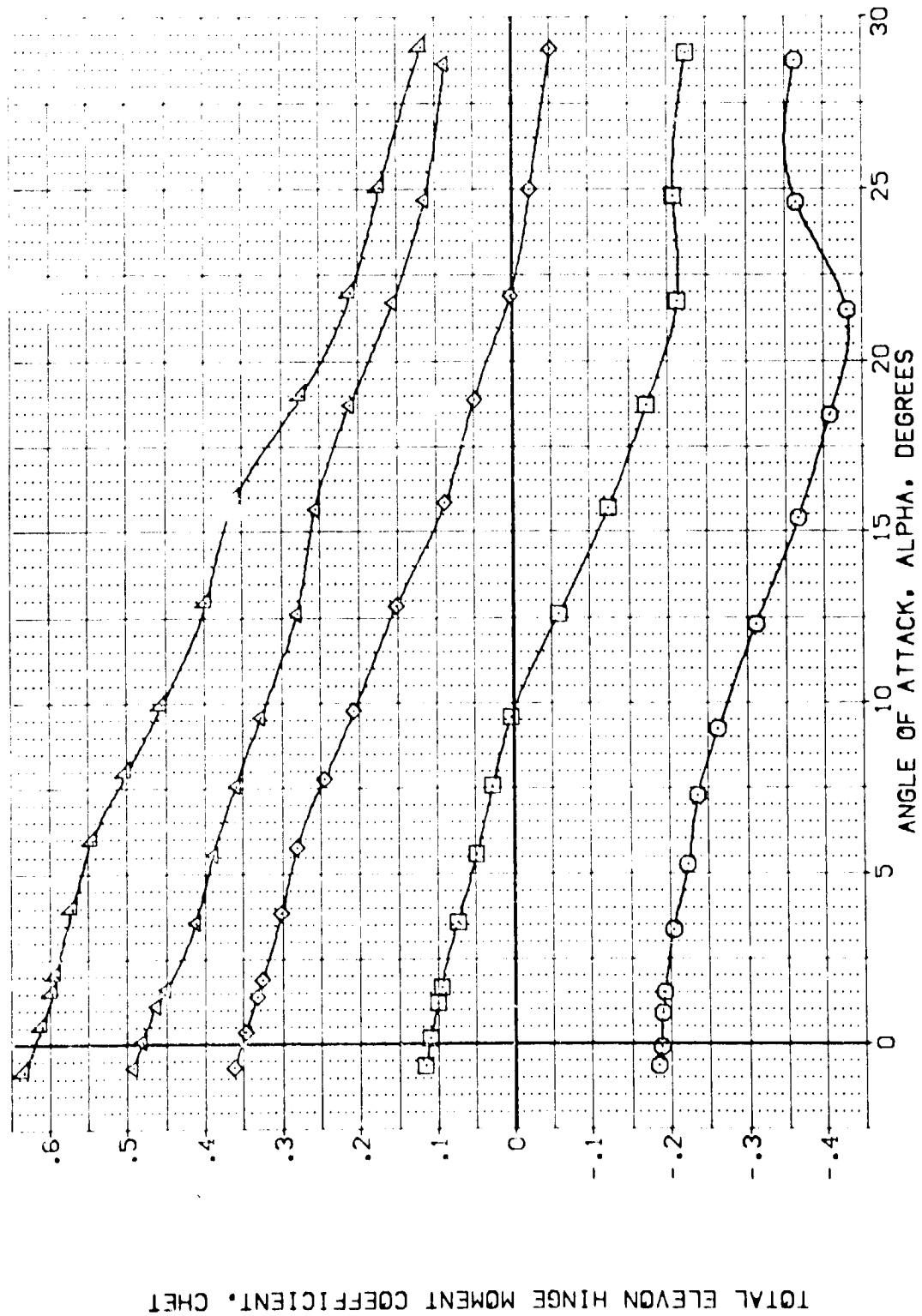


FIG. 30 ELEVON HINGE MOMENTS

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON:	RV/L	ELEVON	AILERON	BOFLAP	SPDRBY	REFERENCE INFORMATION
(YEJ003)	ARC 11-747 OA53A B C H F VI V	NON:	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJ011)	ARC 11-747 OA53A B C H F VI V	NON:	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YEJ002)	ARC 11-747 OA53A B C H F VI V	NON:	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(YEJ019)	ARC 11-747 OA53A B C H F VI V	NON:	RV/L	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
(YEJ023)	ARC 11-747 OA53A B C H F VI V	NON:	RV/L	-40.000	.000	-11.700	25.000	YREF 11.2500 IN.
								ZREF .0000 IN.
								SCALE .0000 IN.

TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

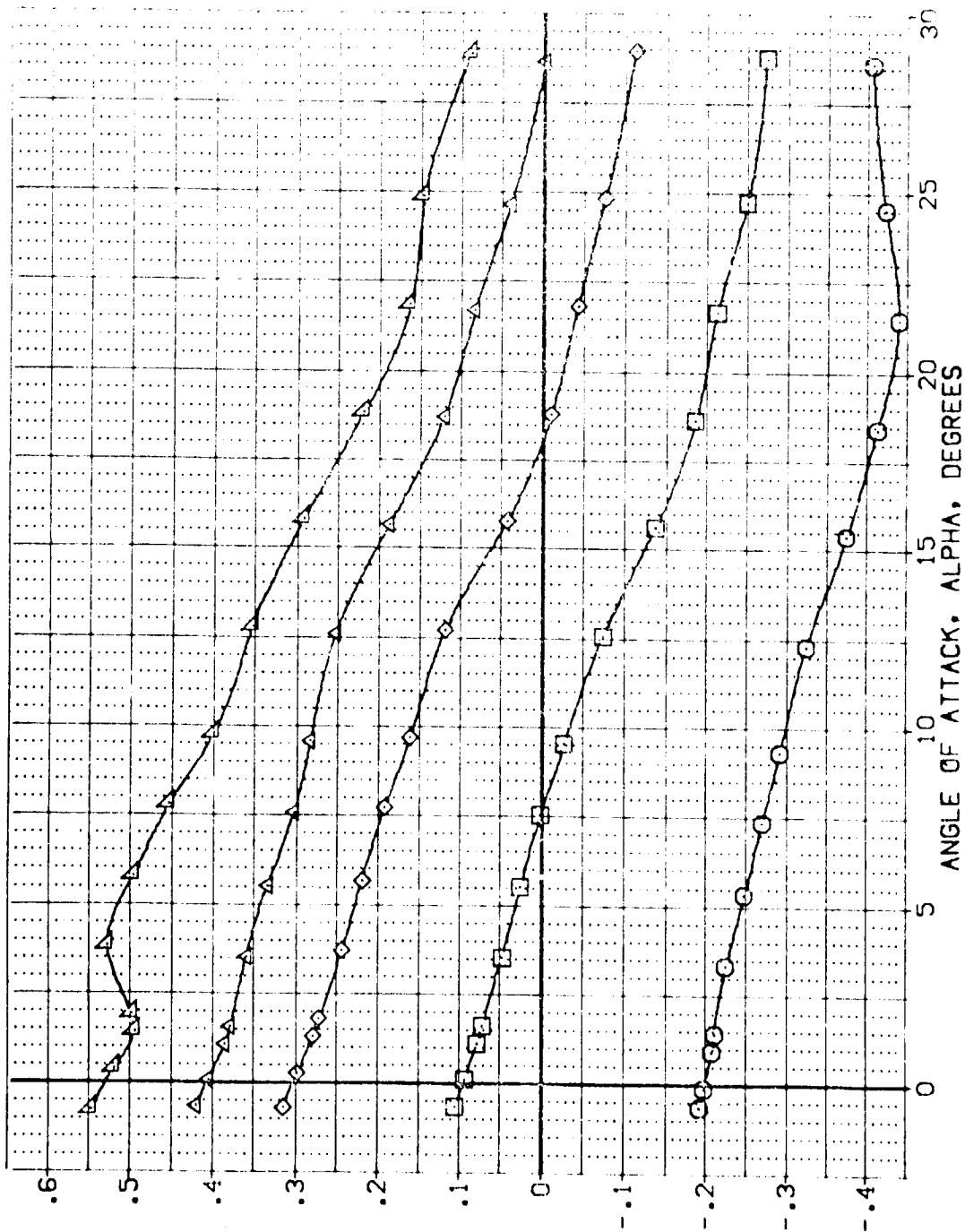
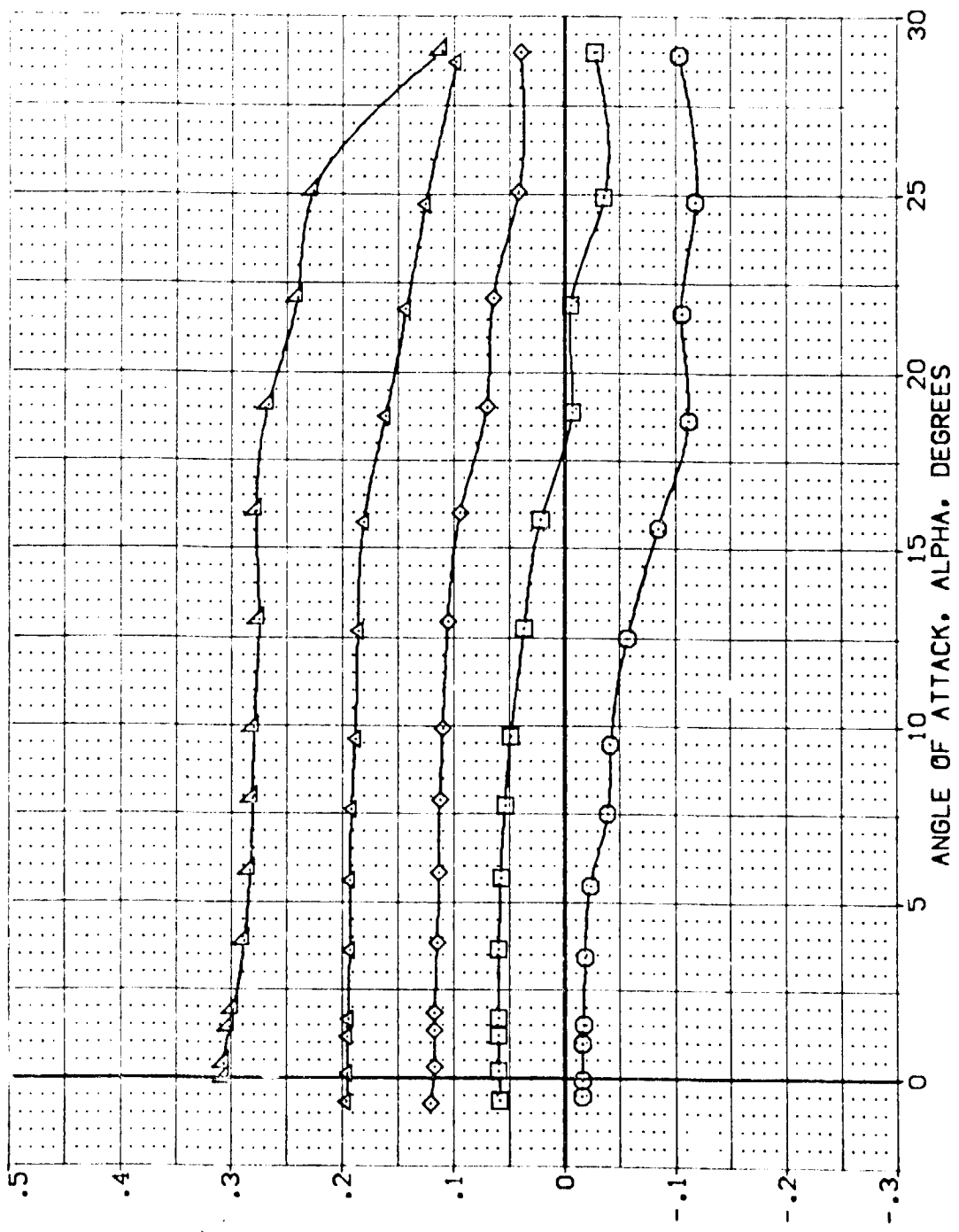


FIG. 30 ELEVON HINGE MOMENTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
(YE1003)	ARC 11-747 C-33A B C M F VI V NOM: RVUL	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE1011)	ARC 11-747 C-33A B C M F VI V NOM: RVUL	.000	.000	-11.700	25.000	LRFF 14.2440 IN.
(YE1022)	ARC 11-747 C-33A B C M F VI V NOM: RVUL	-10.000	.000	-11.700	25.000	BRFF 28.1004 IN.
(YE1019)	ARC 11-747 C-33A B C M F VI V NOM: RVUL	-20.000	.000	-11.700	25.000	XRFF 32.9010 IN.
(YE1073)	ARC 11-747 C-33A B C M F VI V NOM: RVUL	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2000 IN.
						SCALE .0000 SCALE



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>H</sub>

FIG. 30 ELEVON HINGE MOMENTS

(MACH = .60)

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ELEVON	AILRON	BOFLAP	SPOBRK	REFERENCE INFORMATION
{VEJ003}	ARC 11-747 QAS3A B C H F VI V	NON.	RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ011}	ARC 11-747 QAS3A B C H F VI V	NON.	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
{VEJ002}	ARC 11-747 QAS3A B C H F VI V	NON.	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
{VEJ019}	ARC 11-747 QAS3A B C H F VI V	NON.	RV/L	-20.000	.000	-11.700	25.000	XMPP 32.3010 IN.
{VEJ023}	ARC 11-747 QAS3A B C H F VI V	NON.	RV/L	-40.000	.000	-11.700	25.000	ZMPP 11.2500 IN.
								SCALE .0300

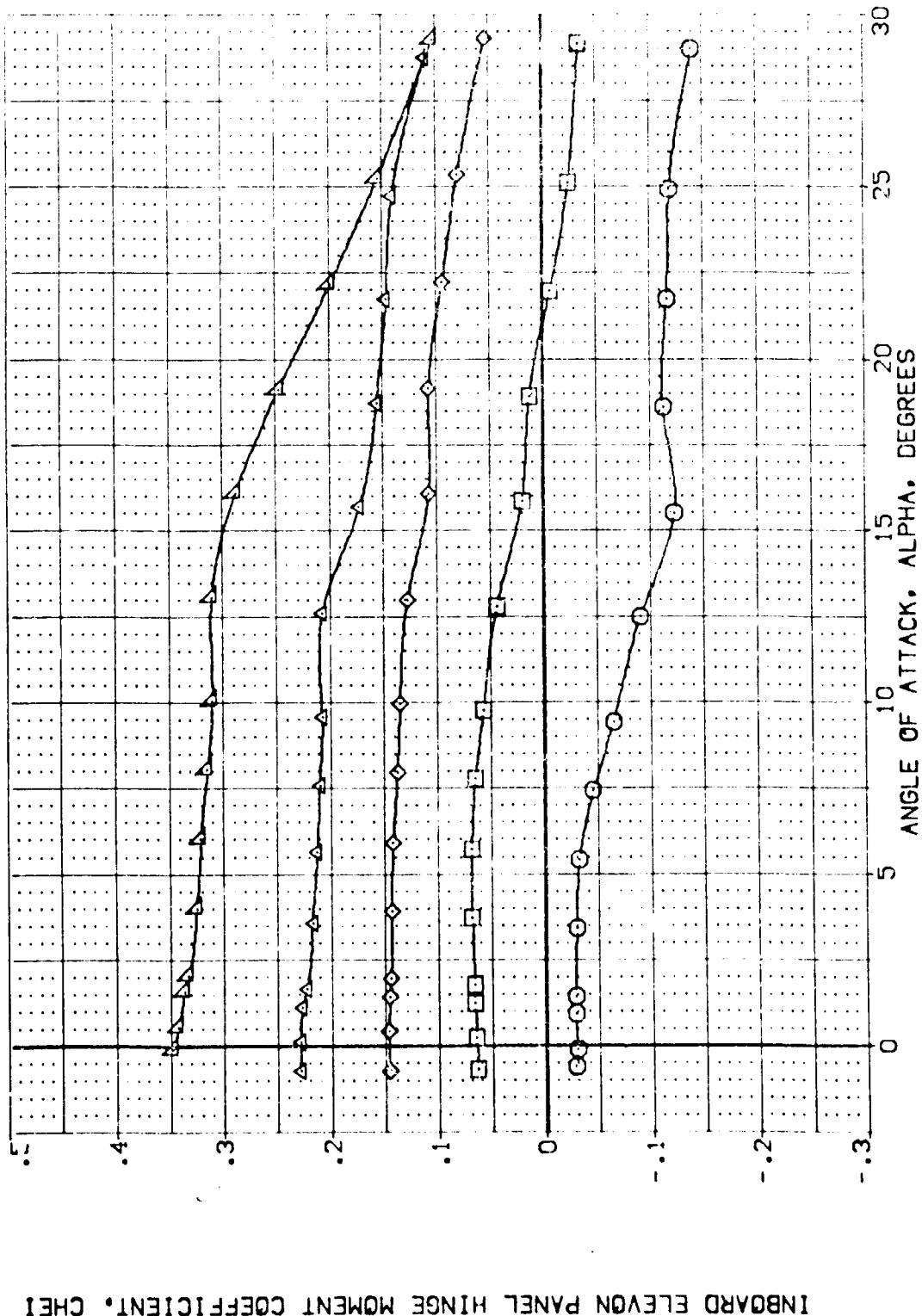
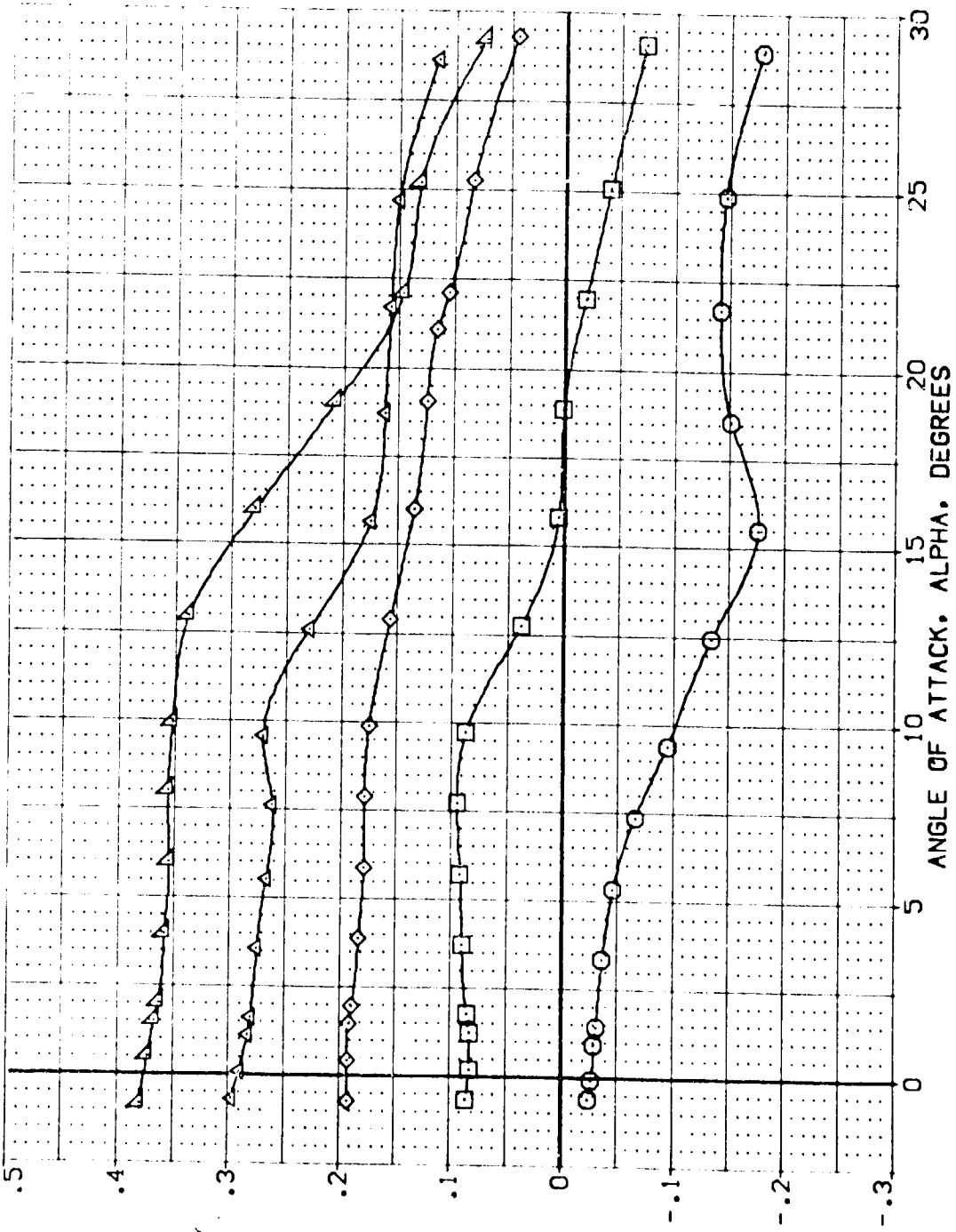


FIG. 30 ELEVON HINGE MOMENTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REF. INFO	SPRINK	ELEVON	AILRON	BOFLAP	SPRINK	REFERENCE INFORMATION
ARC 11-747	0A53A B C M F V	2.4210	25.000	15.000	.000	-11.700	25.000	2.4210 SQ. FT.
ARC 11-747	0A53A B C M F V	14.2440	25.000	.000	.000	-11.700	25.000	14.2440 IN.
ARC 11-747	0A53A B C M F V	28.1004	25.000	-10.000	.000	-11.700	25.000	28.1004 IN.
ARC 11-747	0A53A B C M F V	32.3010	25.000	-20.000	.000	-11.700	25.000	32.3010 IN.
ARC 11-747	0A53A B C M F V	.0030	25.000	-40.000	.000	-11.700	25.000	.0030 IN.
		11.2500						11.2500 IN.
		.0300						.0300 SCALE



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 30 ELEVON HINGE MOMENTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON. RV/L	ELEVON	AILERON	EDFLAP	SPDRBK	REFERENCE INFORMATION
[YEJ003]	ARC 11-747 DAS3A B C M F VI V	NON. RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YEJ011]	ARC 11-747 DAS3A B C M F VI V	NON. RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YEJ002]	ARC 11-747 DAS3A B C M F VI V	NON. RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[YEJ019]	ARC 11-747 DAS3A B C M F VI V	NON. RV/L	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
[YEJ023]	ARC 11-747 DAS3A B C M F VI V	NON. RV/L	-40.000	.000	-11.700	25.000	YREF .0000 IN.
							ZREF 11.2500 IN.
							SCALE .0030

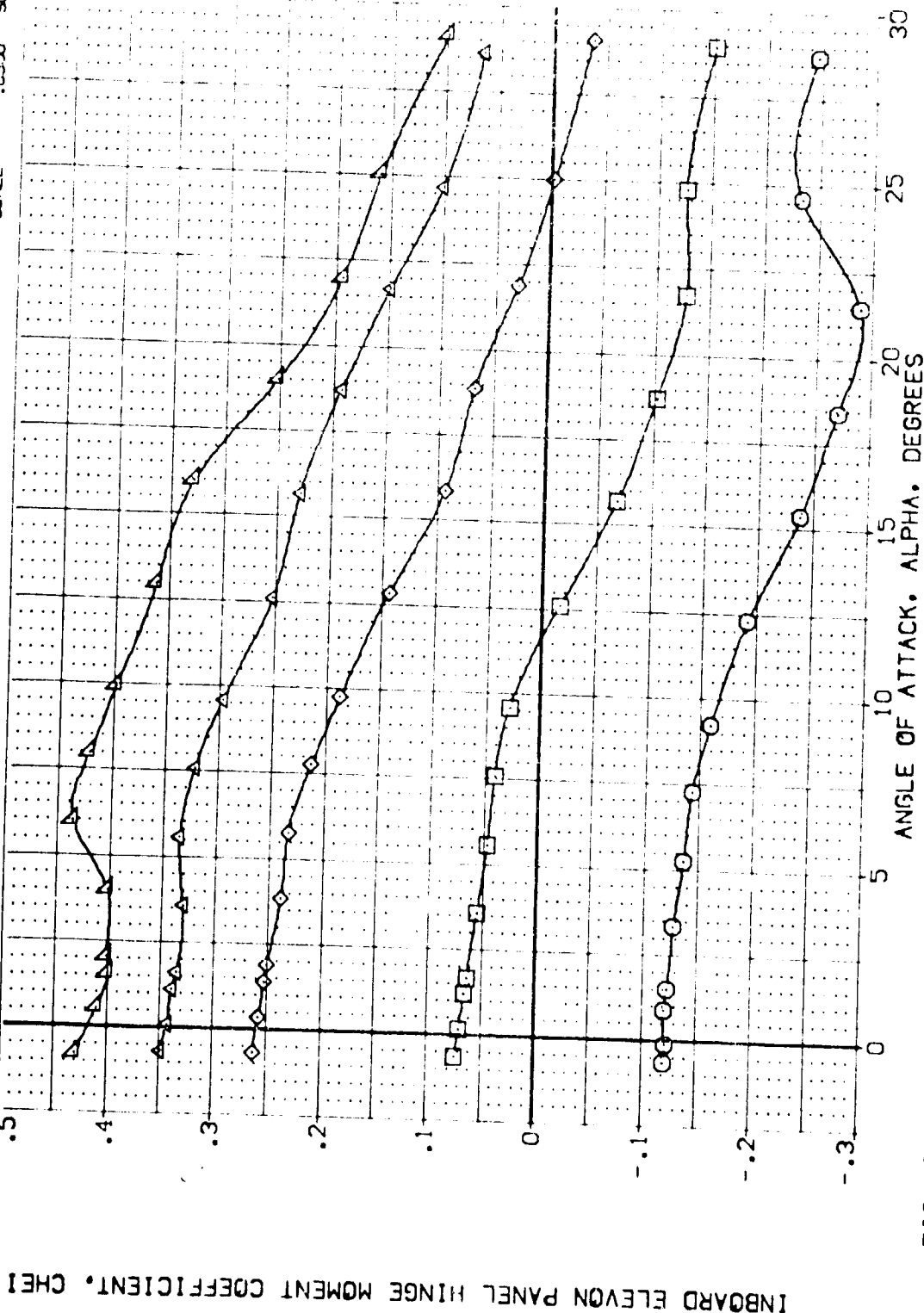


FIG. 30 ELEVON HINGE MOMENTS

(D)MACH = 1.05

DATA SET SYMB	CONFIGURATION DESCRIPTION	ADJ.	RV/L	ELEVON	AILERON	BOFLAP	STOBRK	REFERENCE INFORMATION
(YEJ003)	ARC 11-747 CA53A B C H F V	V	RV/L	15.000	.000	-11.700	25.000	SREF 2.42 0 SQ.FT.
(YEJ011)	ARC 11-747 CA53A B C H F V	V	RV/L	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YEJ002)	ARC 11-747 CA53A B C H F V	V	RV/L	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(YEJ019)	ARC 11-747 CA53A B C H F V	V	RV/L	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
(YEJ023)	ARC 11-747 CA53A B C H F V	V	RV/L	-40.000	.000	-11.700	25.000	YREF .0030 IN.
								ZREF 11.2500 IN.
								SCALE .0000

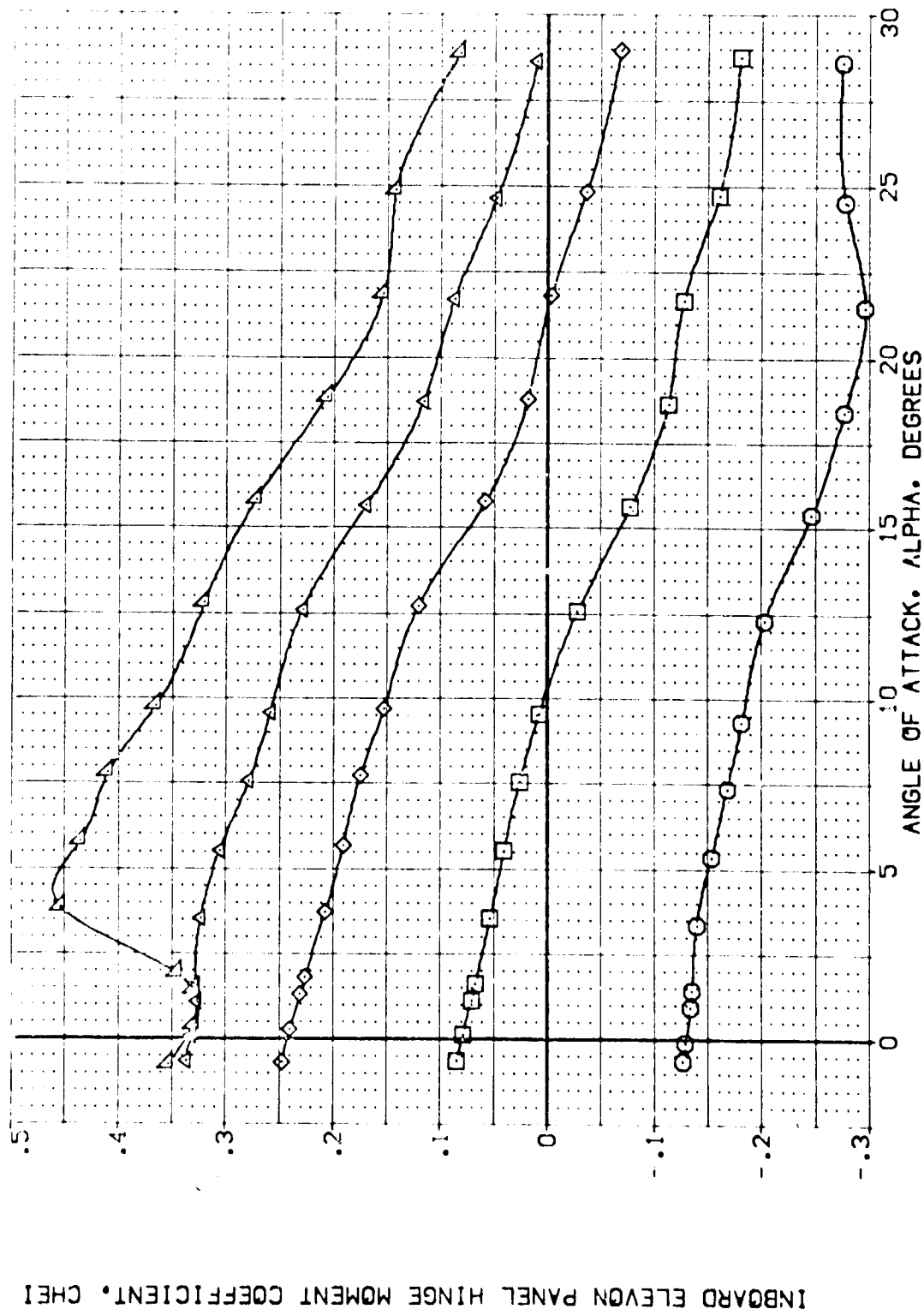
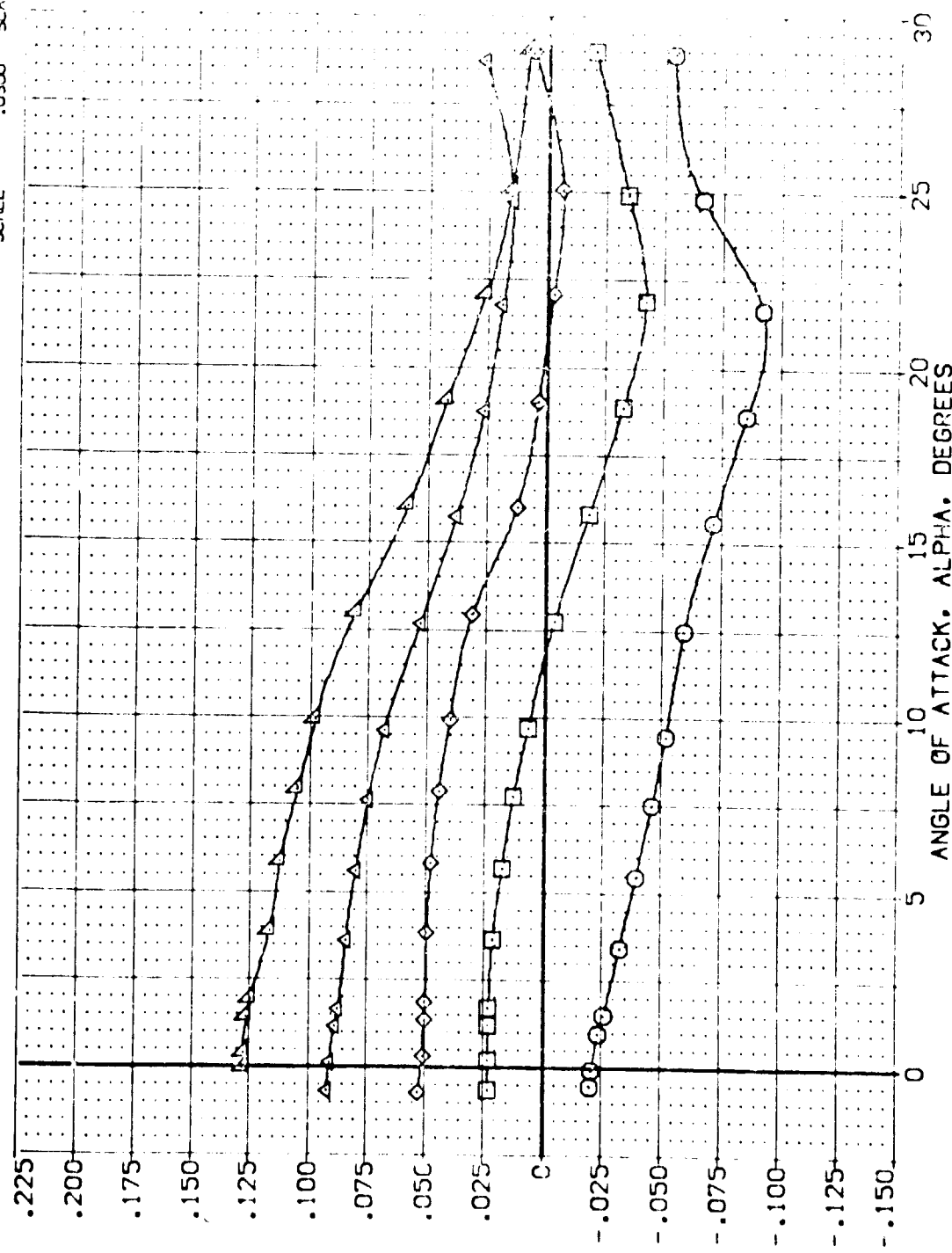


FIG. 30 ELEVON HINGE MOMENTS

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BD FLAP	SPD BRK	REFERENCE INFORMATION
[YEJ003]	ARC 11-747 CAS3A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[YEJ011]	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YEJ002]	ARC 11-747 CAS3A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[YEJ019]	ARC 11-747 CAS3A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.9010 IN.
[YEJ023]	ARC 11-747 CAS3A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2000 IN.
						SCALE .0000



OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEO

FIG. 30 ELEVON HINGE MOMENTS

(A)MACH = .60



DATA SET SYMB.	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BDF LAP	SPOORX	REFERENCE INFORMATION
(Y24003)	ABC 11-747 D-53A B C H F V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(Y24011)	ABC 11-747 D-53A B C H F V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(Y24022)	ABC 11-747 D-53A B C H F V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(Y24019)	ABC 11-747 D-53A B C H F V	-20.000	.000	-11.700	25.000	APREF 32.3000 IN.
(Y24023)	ABC 11-747 D-53A B C H F V	-40.000	.000	-11.700	25.000	APREF 32.3000 IN.
						ZREF 11.2500 IN.
						SCALE 10.000

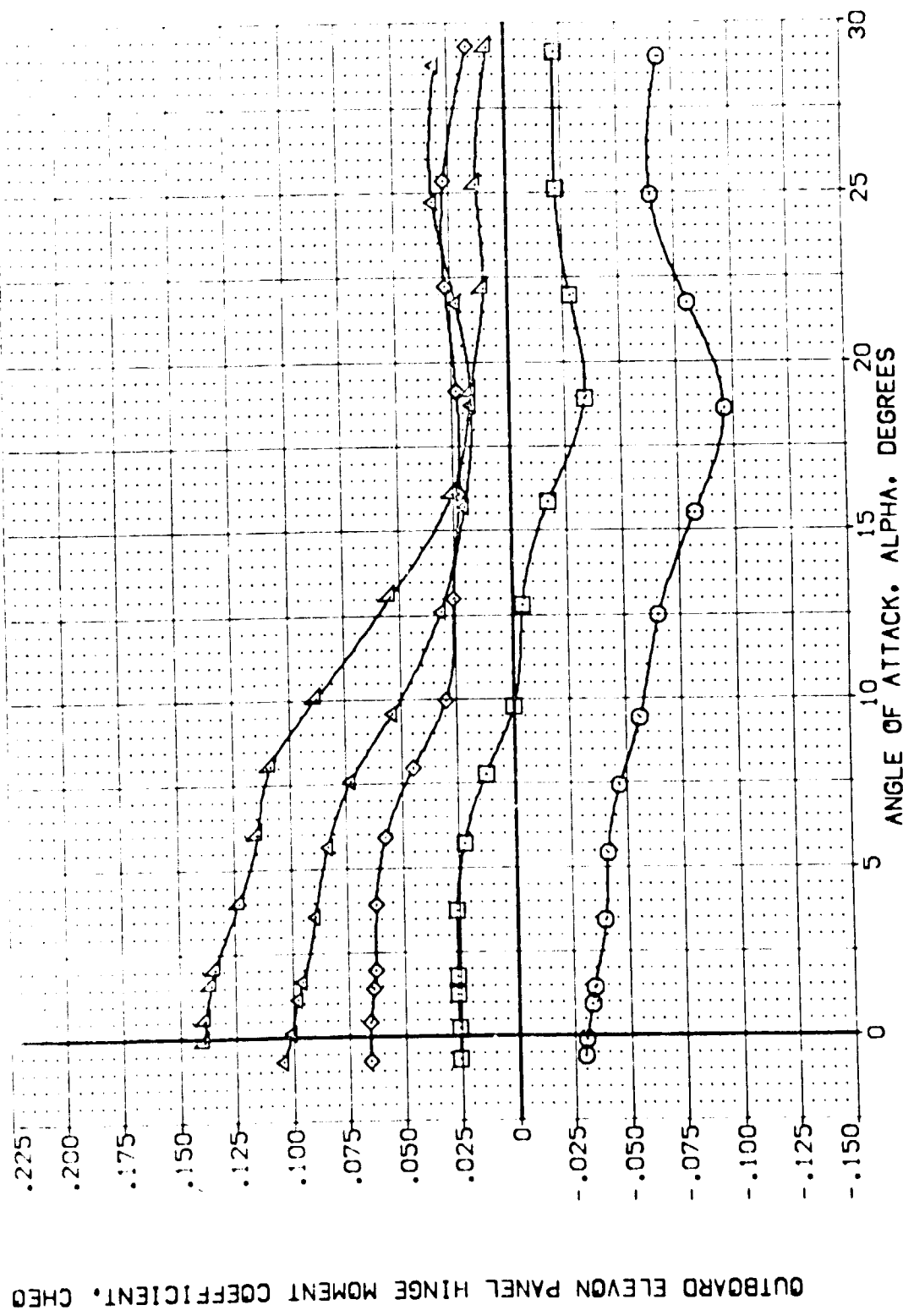


FIG. 30 ELEVON HINGE MOMENTS  
(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT: RV/L	ELEVON	AILERON	BOFLAP	SPDRK	REFERENCE INFORMATION
ARC 11-747 QAS3A B C H F VI V		RV/L	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
ARC 11-747 QAS3A B C H F VI V		RV/L	.000	.000	-11.700	25.000	LREF 14.2410 IN.
ARC 11-747 QAS3A B C H F VI V		RV/L	-10.000	.000	-11.700	25.000	LRREF 28.1004 IN.
ARC 11-747 QAS3A B C H F VI V		RV/L	-20.000	.000	-11.700	25.000	XRREF 32.3010 IN.
ARC 11-747 QAS3A B C H F VI V		RV/L	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
		RV/L					ZMRP 11.2500 IN.
							SCALE .0030

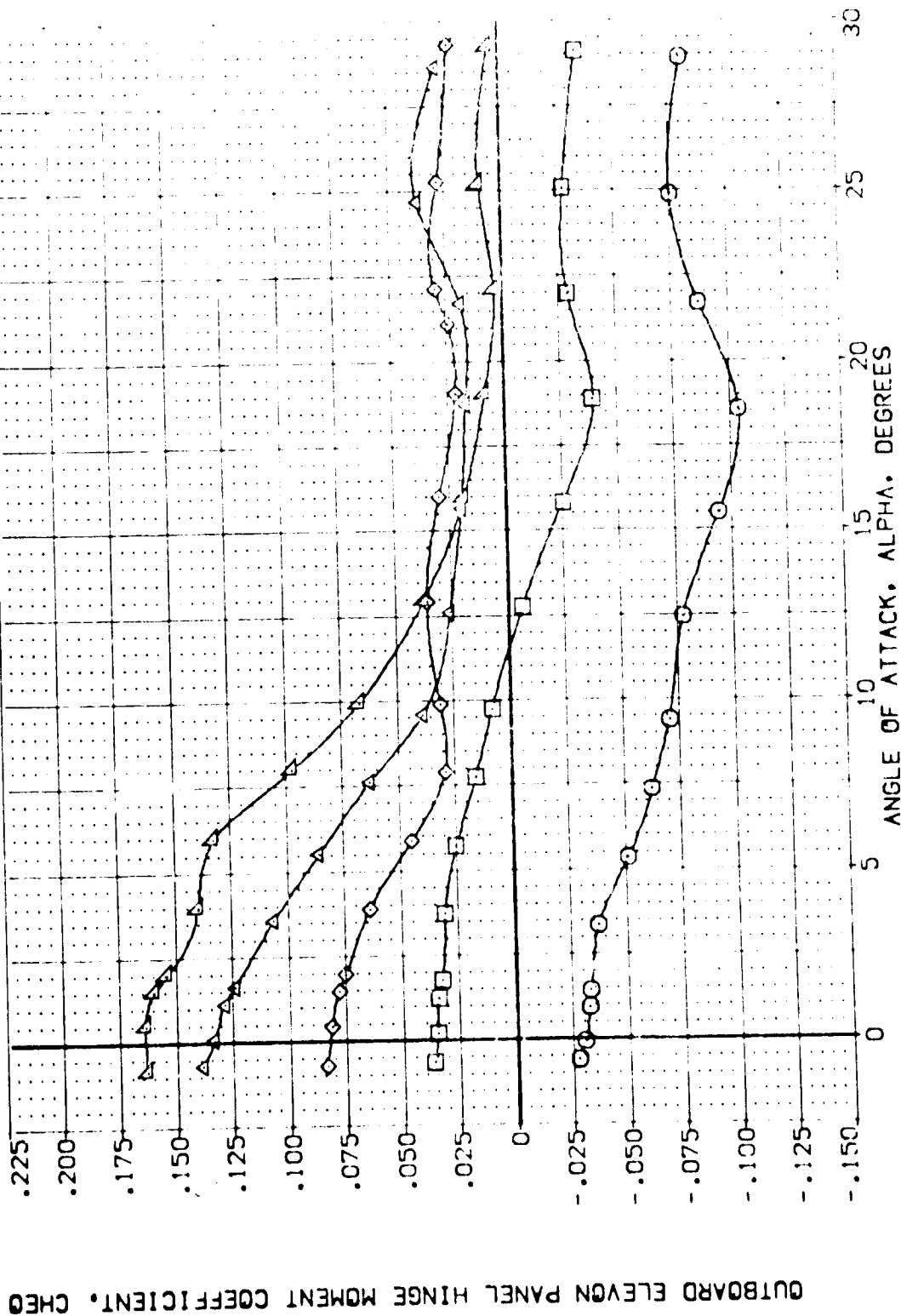
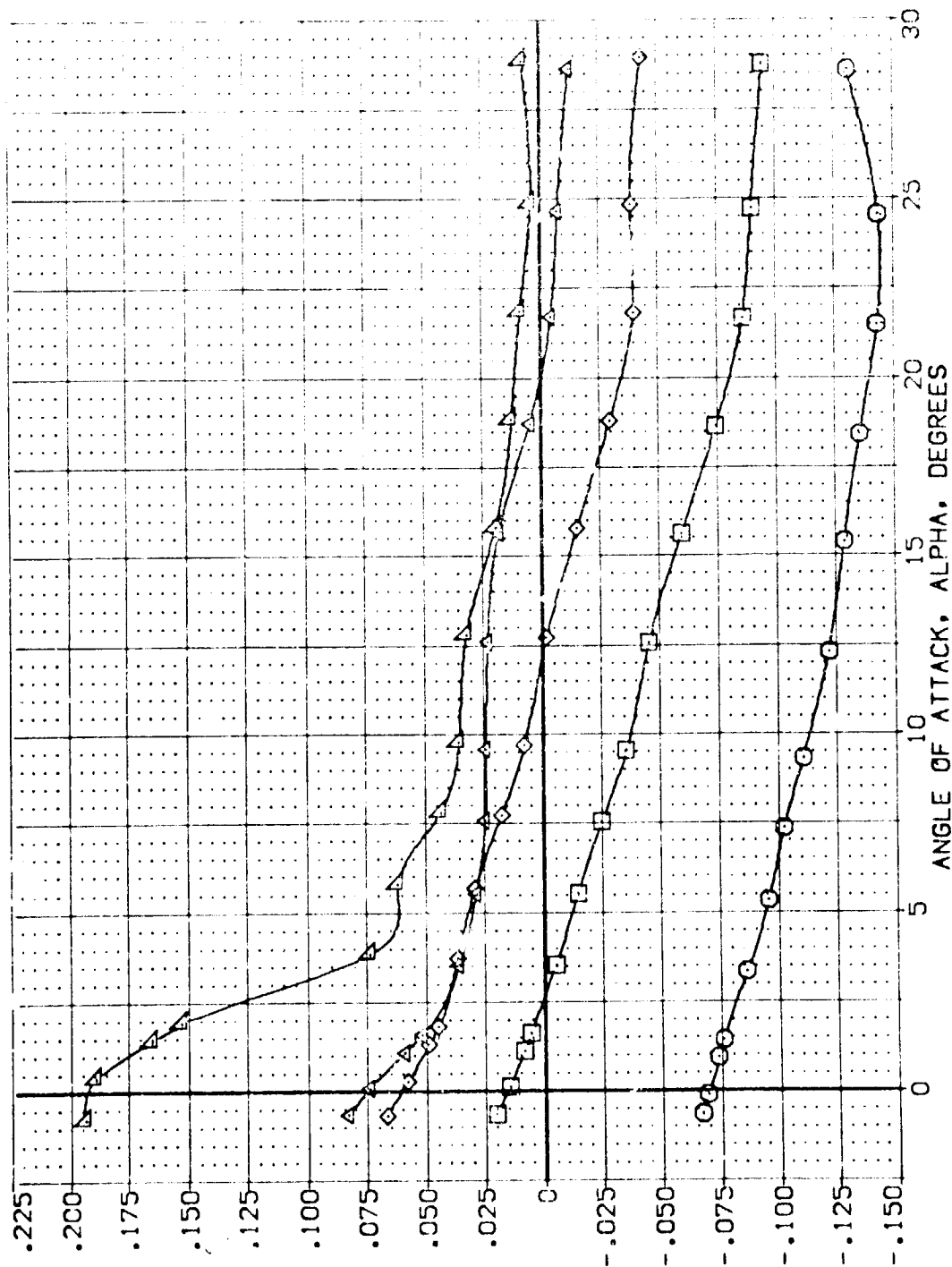


FIG. 30 ELEVON HINGE MOMENTS

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BUFLAP	SPDBRK	REFERENCE INFORMATION
(YE4003)	ARC 11-747 DA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE4011)	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YE400C)	ARC 11-747 DA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(YE4019)	ARC 11-747 DA53A B C M F VI V	-20.000	.000	-11.700	25.000	XREF 32.3010 IN.
(YE4023)	ARC 11-747 DA53A B C M F VI V	-40.000	.000	-11.700	25.000	YREF 11.0000 IN.
						ZREF 0.0000 IN.
						SCALE 0.000



OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEO

FIG. 30 ELEVON HINGE MOMENTS

(EJMACH = 1.20)

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ELEVON	AILERON	BODY LAP	SPD BRK	REFERENCE INFORMATION
(Y4010)	ARC 177	BAS3A B C M F V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(Y4016)	ARC 177	BAS3A B C M F V	.000	.000	16.300	25.000	DRF 14.2440
(Y4011)	ARC 177	BAS3A B C M F V	.000	.000	-11.700	25.000	BRF 18.3004
							YMRP 32.3010
							YMRP .0000
							ZMRP .0000
							SCALE 11.7300
							SCALE .0300

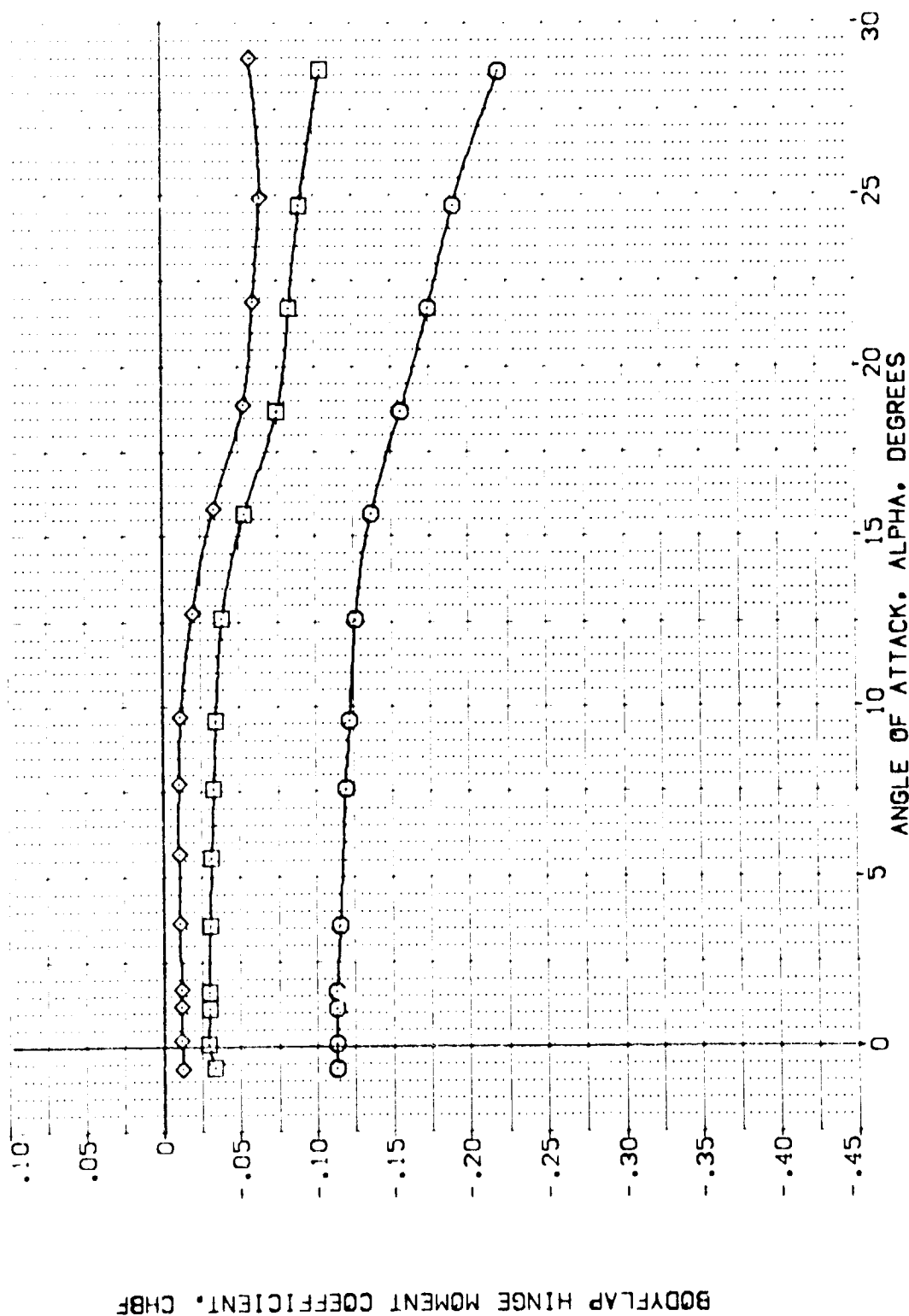


FIG. 31 BODYFLAP HINGE MOMENTS

(M)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPOTBRK	REFERENCE INFORMATION
(VE4010)	ARC 11-747 DA53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
(VE4016)	ARC 11-747 DA53A B C H F VI V	.000	.000	16.300	25.000	LREF 14.2440
(VE4011)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 28.1004
						XMRD 32.3010
						YMRD .0000
						ZMRD 11.2500
						SCALE .0300

BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

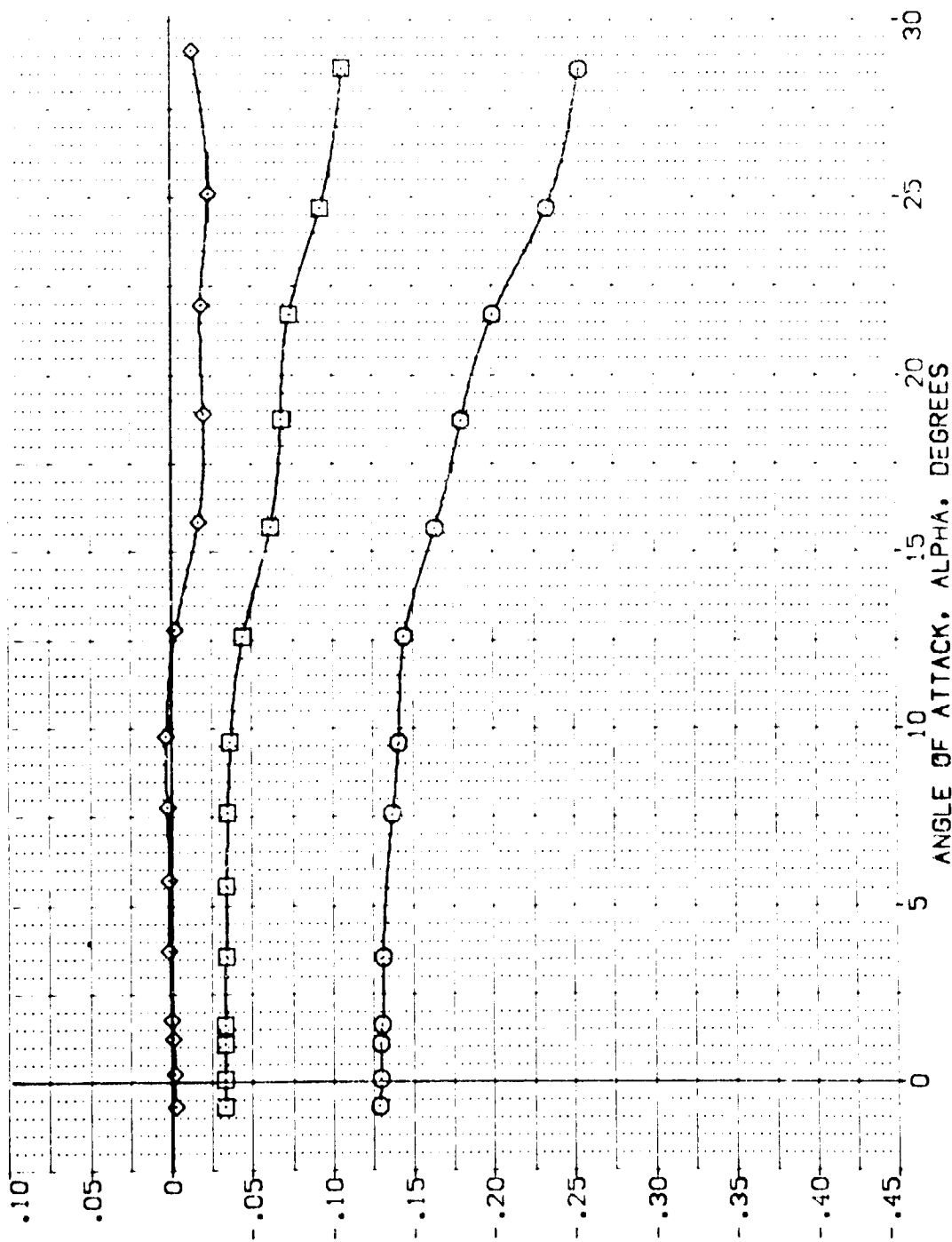
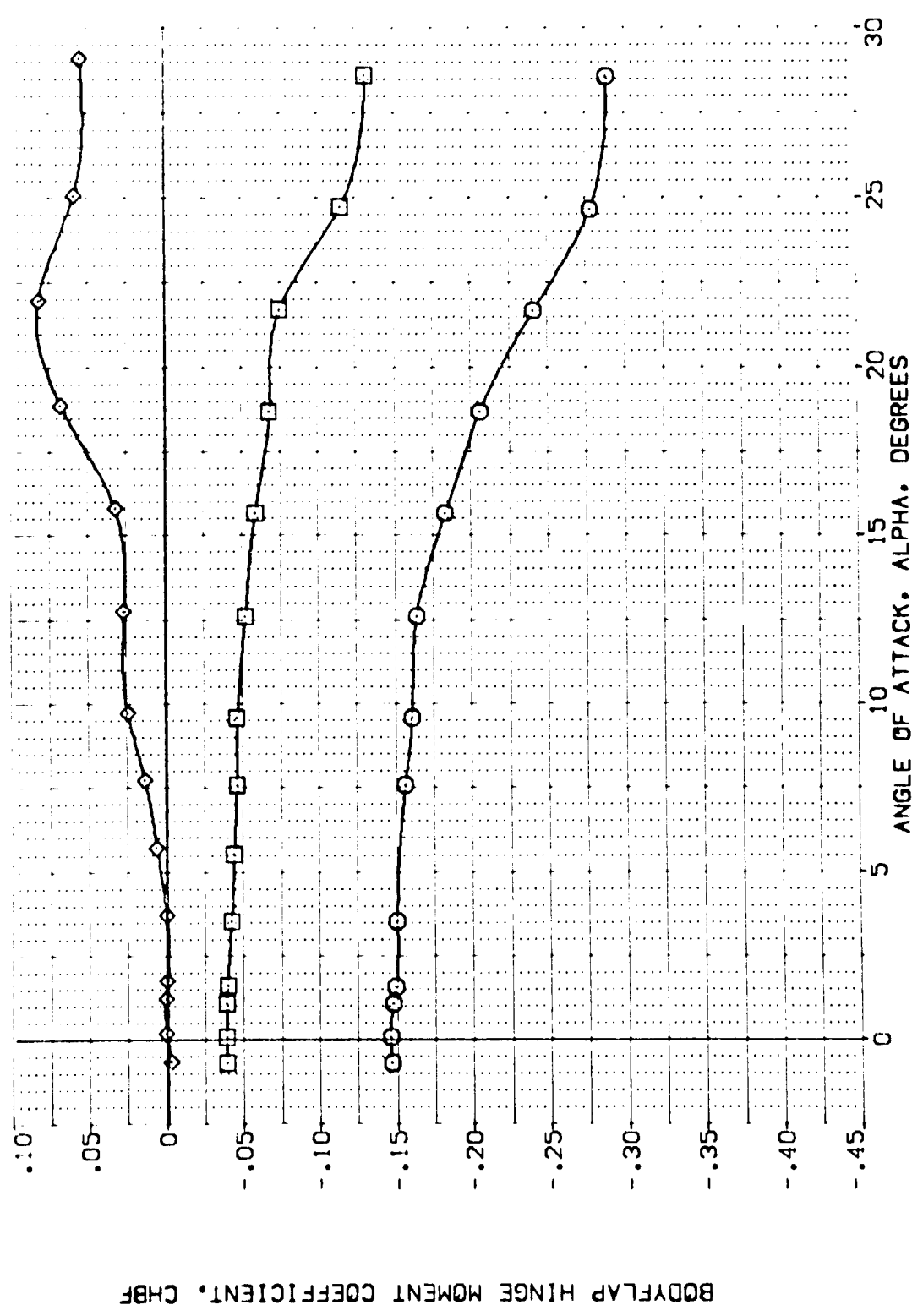


FIG. 31 BODYFLAP HINGE MOMENTS

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BODYFLAP	SPOILER	REFERENCE INFORMATION
[Y0101]	ARC 11-747 D-53A B C F V	.000	.000	16.300	25.000	SREF 2.4210 SQ. FT.
[Y0101]	ARC 11-747 D-53A B C F V	.000	.000	.000	25.000	LREF 14.2440
[Y0101]	ARC 11-747 D-53A B C F V	.000	.000	.000	25.000	BREF 28.1004
[Y0101]	ARC 11-747 D-53A B C F V	.000	.000	-11.700	25.000	YMRD 32.3010
						ZMRD .0000
						SCALE 11.2500
						SCALE .0300



BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

FIG. 31 BODYFLAP HINGE MOMENTS

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
{YEJ010}	ARC 11-747 BA53A B C M F V1 V	.000	.000	16.300	25.000	SREF 2.4210 SQ.FT.
{YEJ016}	ARC 11-747 BA53A B C M F V1 V	.000	.000	.000	25.000	LREF 14.2440
{YEJ011}	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500 IN.
						SCALE .0300

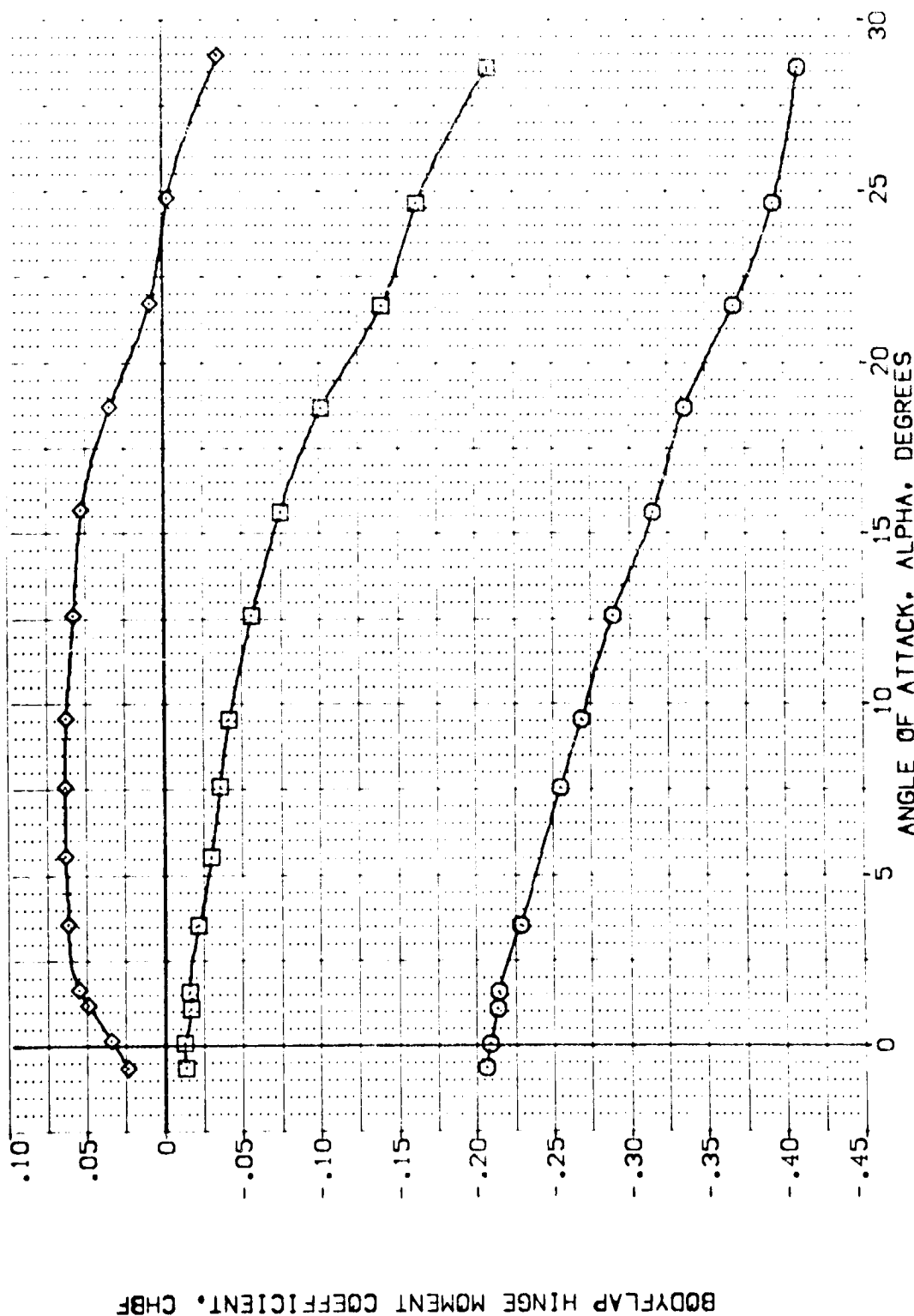
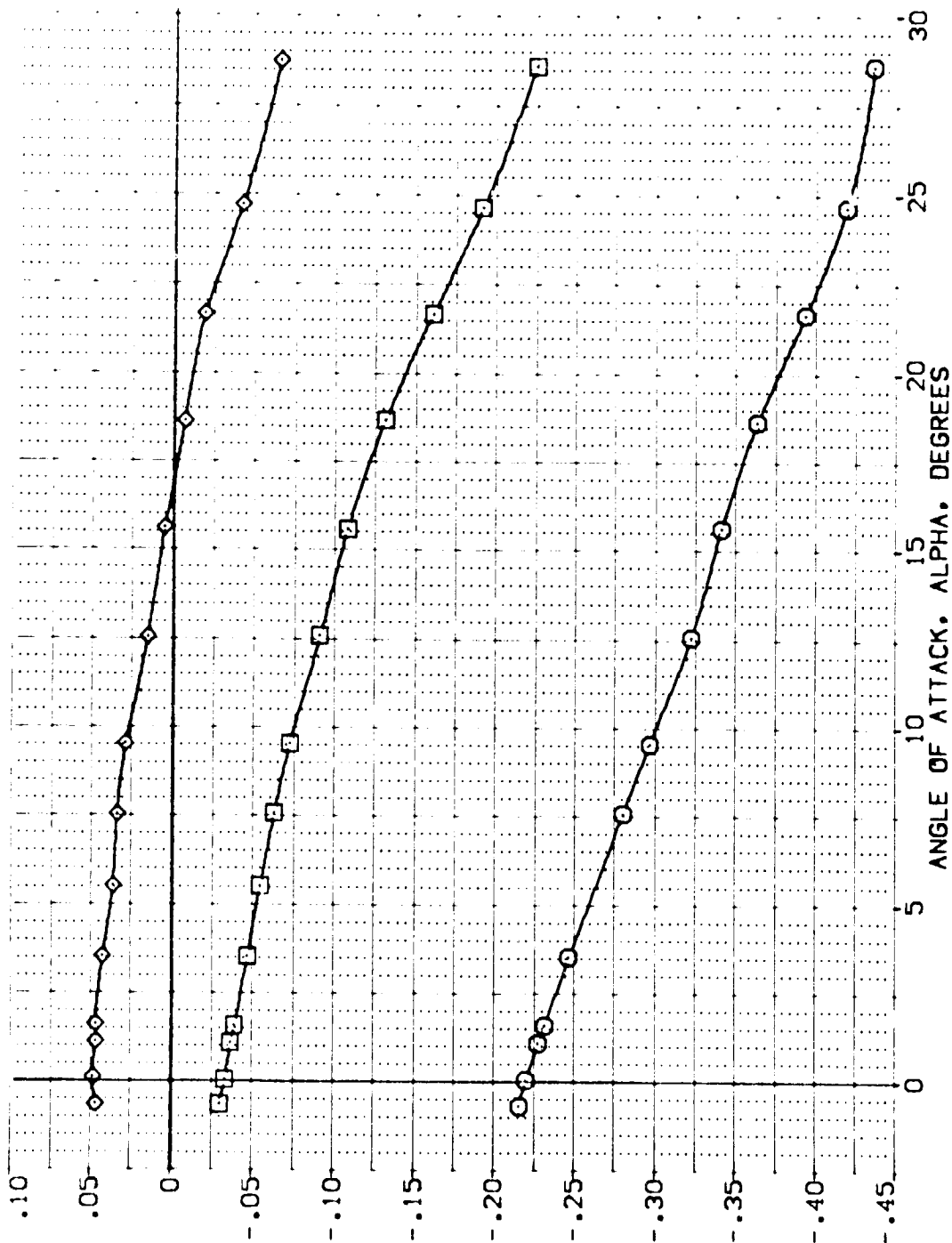


FIG. 31 BODYFLAP HINGE MOMENTS

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVATION	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
VE4010	ARC 11-74 0A53A B C H F VI V	.000	.000	16.300	25.000	SREF 2.4210 50.FT.
VE4016	ARC 11-747 0A53A B C H F VI V	.000	.000	.000	25.000	LREF 14.2440 IN.
VE4017	ARC 11-747 0A53A B C H F VI V	.000	.000	-11.700	25.000	BREF 26.1004 IN.
						XMRD 32.3010 IN.
						YMRD 11.2500 IN.
						ZMRD 11.2500 IN.
						SCALE .0300



BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

FIG. 31 BODYFLAP HINGE MOMENTS

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDRM	REFERENCE INFORMATION
[YEJ012]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
[YEJ013]	ARC 11-747 DA53A B C M F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YEJ014]	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[YEJ055]	ARC 11-747 DA53A B C M F VI V	.000	.000	-11.700	55.000	YMRP 32.3010 IN.
[YEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	ZMRP .0000 IN.
[YEJ057]	ARC 11-747 DA53A B C M F VI V	20.000	.000	-11.700	55.000	SCALE 1.2500 SCALE

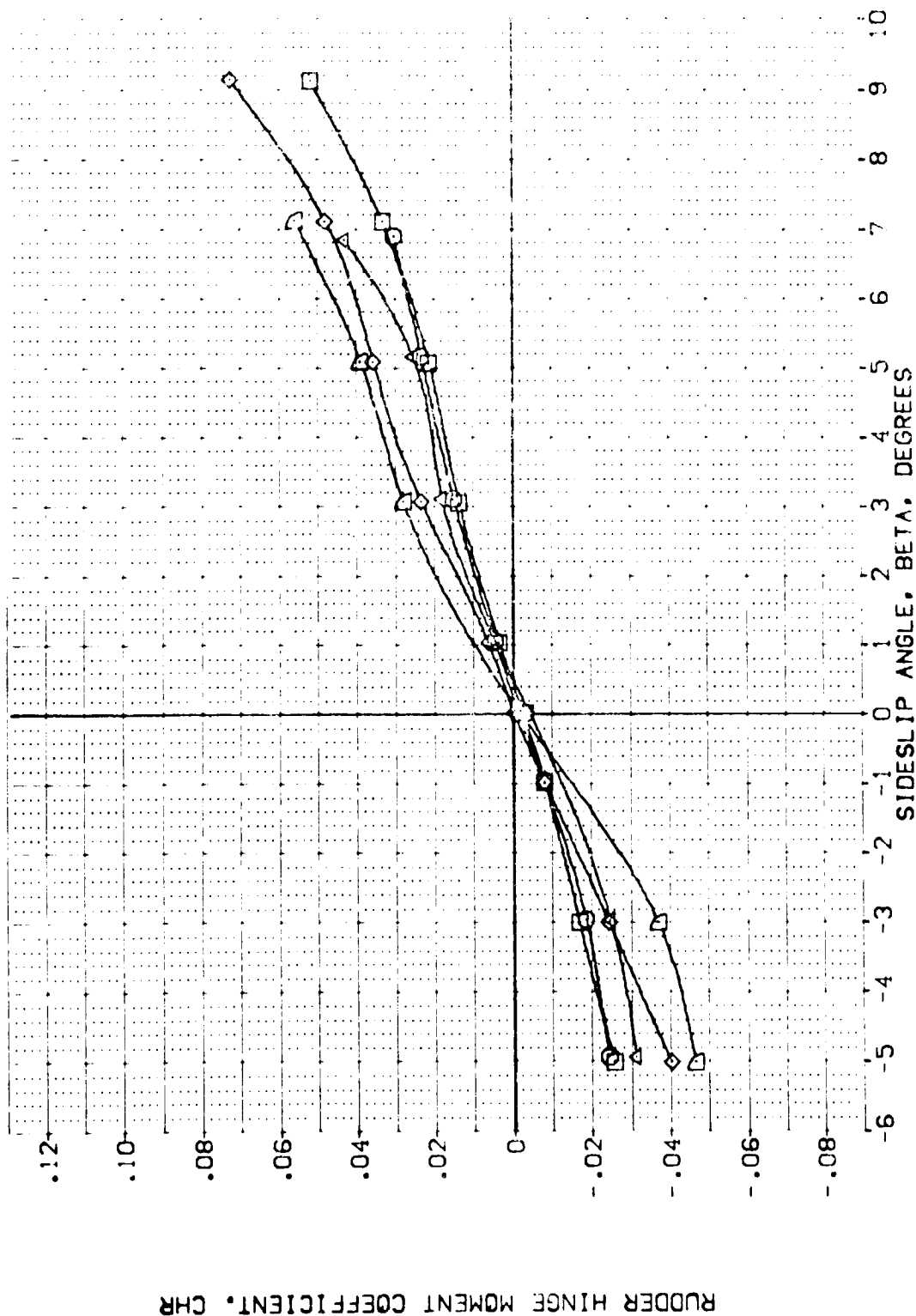


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

[AJMAC] = .60

DATA SET SYMBOL	CONF. DESCRIPTION	ALPHA	RUDDER	BOE-LAP	SPOURK	REFERENCE INFORMATION:
[YES] (1)	ARC 11-747 GA53A B C H F V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YES] (2)	ARC 11-747 GA53A B C H F V	10.000	.000	-11.700	25.000	LREF 14.2440
[YES] (3)	ARC 11-747 GA53A B C H F V	20.000	.000	-11.700	25.000	BREF 28.1004
[YES] (4)	ARC 11-747 GA53A B C H F V	10.000	.000	-11.700	55.000	XREF 32.3010
[YES] (5)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YREF 11.7500
[YES] (6)	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZREF .0300
[YES] (7)	DATA NOT AVAILABLE					SCALE

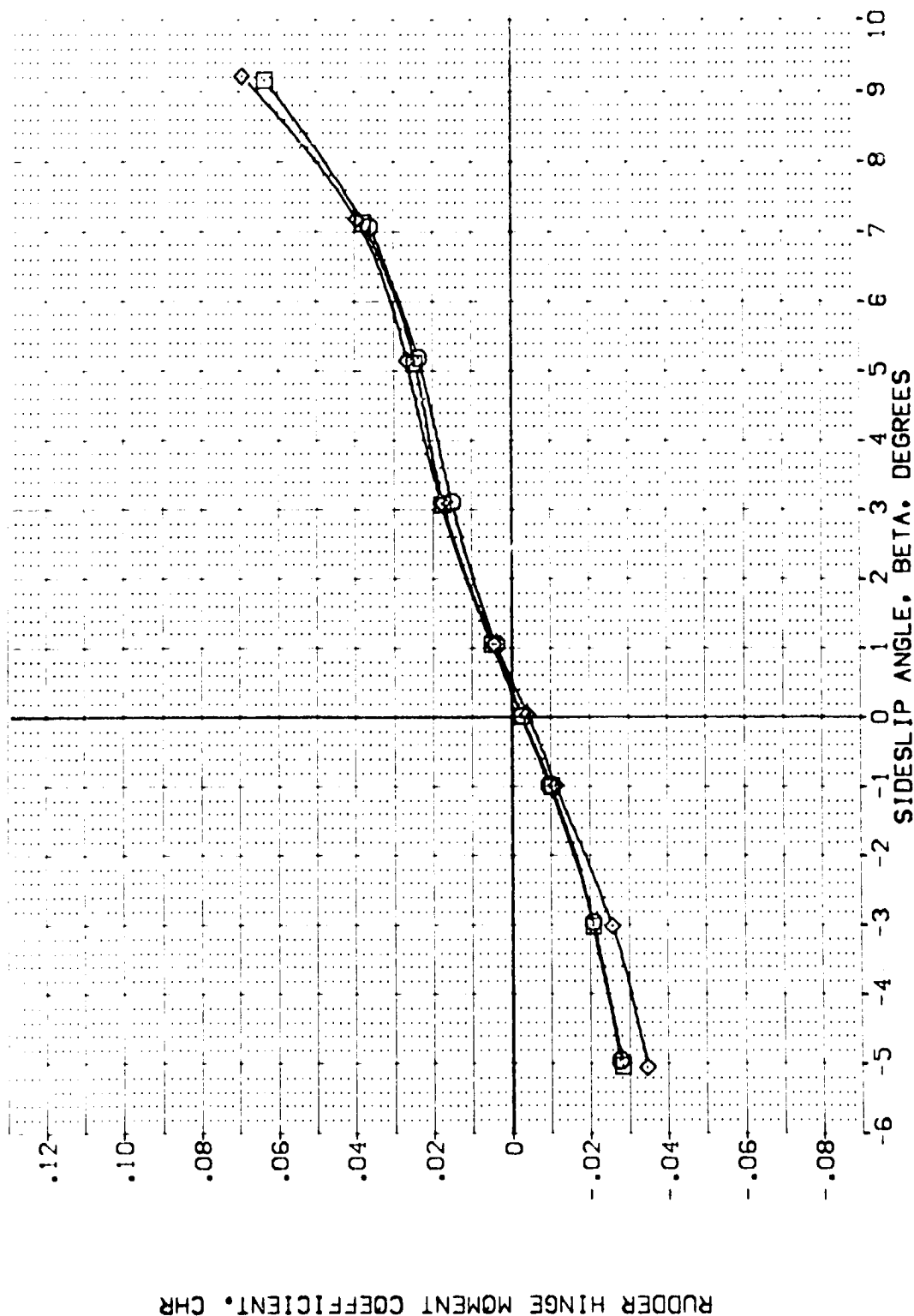


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDRK	REFERENCE INFORMATION
[YE4012]	ARC    -747 BA53A B C M F V   V	.000	.000	-.700	25.000	SREF 2.4210 SC.F
[YE4013]	ARC    -747 BA53A B C M F V   V	10.000	.000	-.700	25.000	LBREF 14.2440
[YE4014]	ARC    -747 BA53A B C M F V   V	20.000	.000	-.700	25.000	BRREF 28.1004
[YE4055]	ARC    -747 BA53A B C M F V   V	10.000	.000	-.700	55.000	XBREF 32.3000
[YE4056]	ARC    -747 BA53A B C M F V   V	10.000	.000	-.700	55.000	YBREF 32.3000
[YE4057]	ARC    -747 BA53A B C M F V   V	20.000	.000	-.700	55.000	ZBREF 32.3000
						SCALE .0300 SCALE

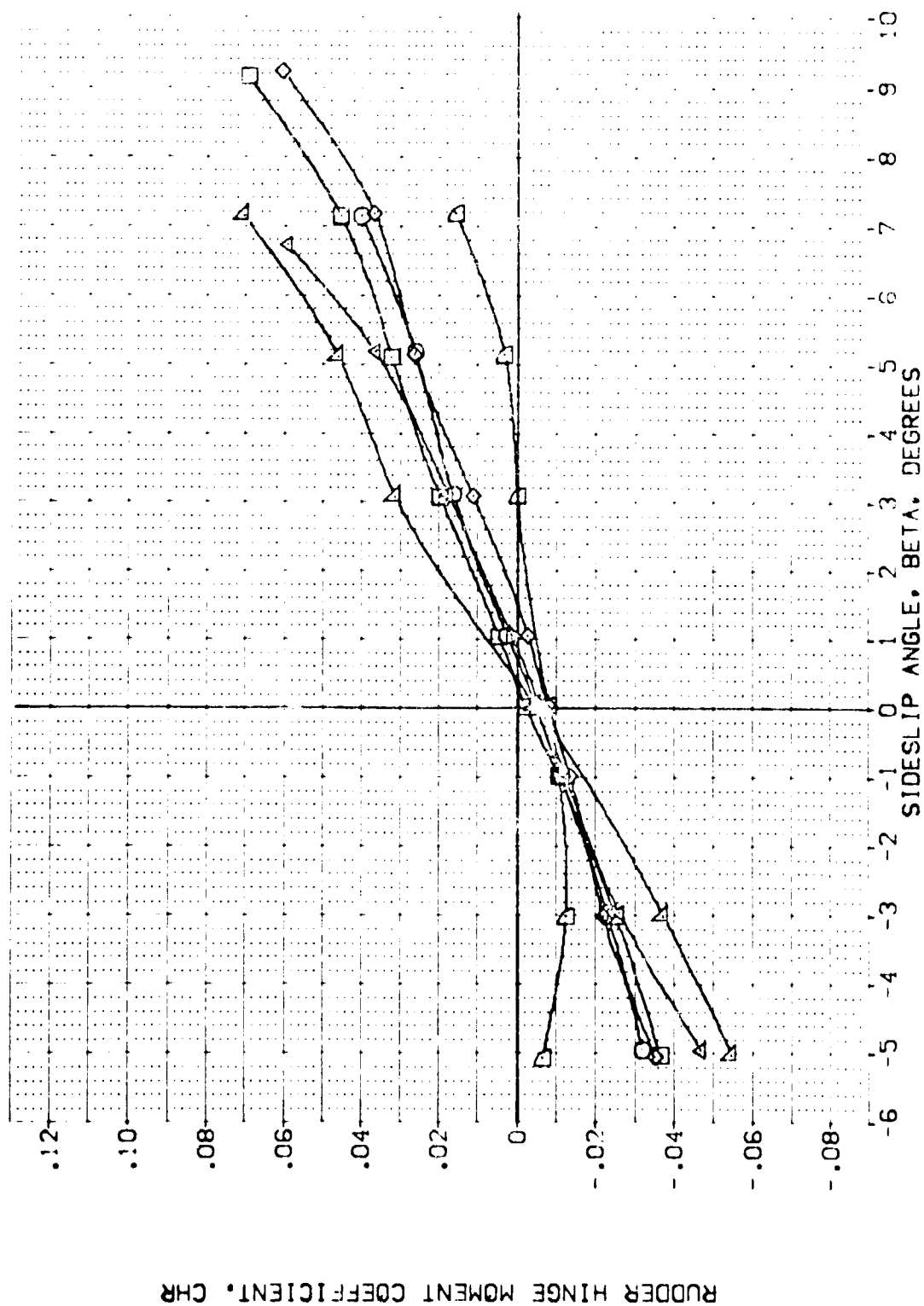
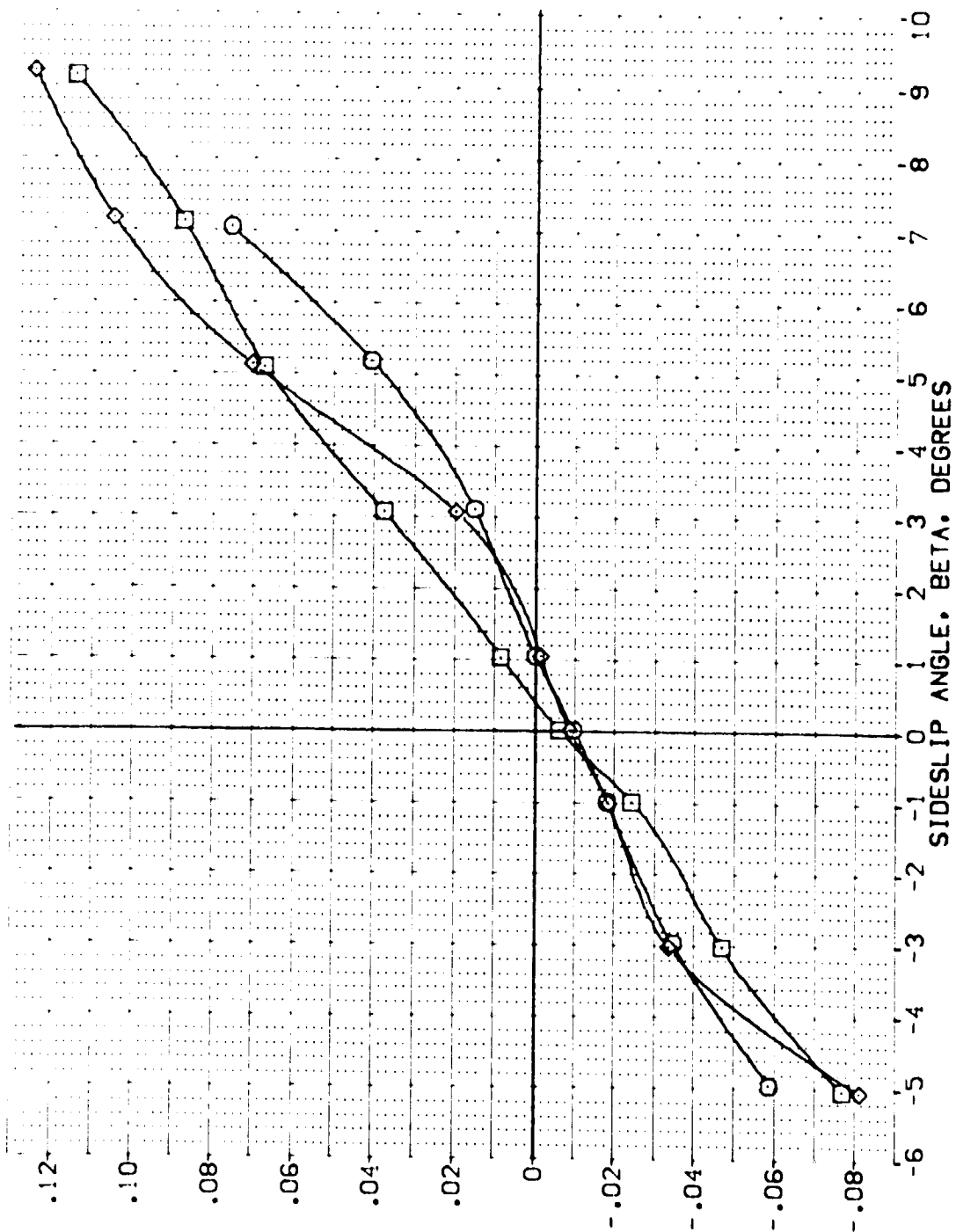


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(CJ)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDRK	REFERENCE INFORMATION
(YEJ012)	Q	ARC 11-747 DASSA B C M F V	.000	.000	-11.700	25.000	SREF 2.4210 50. FT.
(YEJ013)	X	ARC 11-747 DASSA B C M F V	10.000	.000	-11.700	25.000	REF 14.2440
(YEJ014)	X	ARC 11-747 DASSA B C M F V	20.000	.000	-11.700	25.000	BREF 28.1004
(YEJ015)	X	ARC 11-747 DASSA B C M F V	30.000	.000	-11.700	55.000	XREF 32.3010
(YEJ016)	X	DATA NOT AVAILABLE	40.000	.000	-11.700	55.000	YREF 11.2500
(YEJ017)	X	DATA NOT AVAILABLE	50.000	.000	-11.700	55.000	ZREF 11.2500
(YEJ018)	X	DATA NOT AVAILABLE	60.000	.000	-11.700	55.000	SCALE .0300



RUDDER HINGE MOMENT COEFFICIENT, CHR

FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(Q)MACF = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ALPHA	RUDDER	BD/LAP	SPDBRK	REFERENCE INFORMATION
[YE4012]	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE4013]	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	10.000	.000	-11.700	25.000	LREF 14.2440
[YE4014]	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	20.000	.000	-11.700	25.000	BREF 28.1004
[YE4055]	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	10.000	.000	-11.700	55.000	XMRP 32.3010
[YE4056]	DATA NOT AVAILABLE			10.000	.000	-11.700	55.000	YMRP .3000
[YE4057]	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	20.000	.000	-11.700	55.000	ZMRP .3000
								SCALE .0300

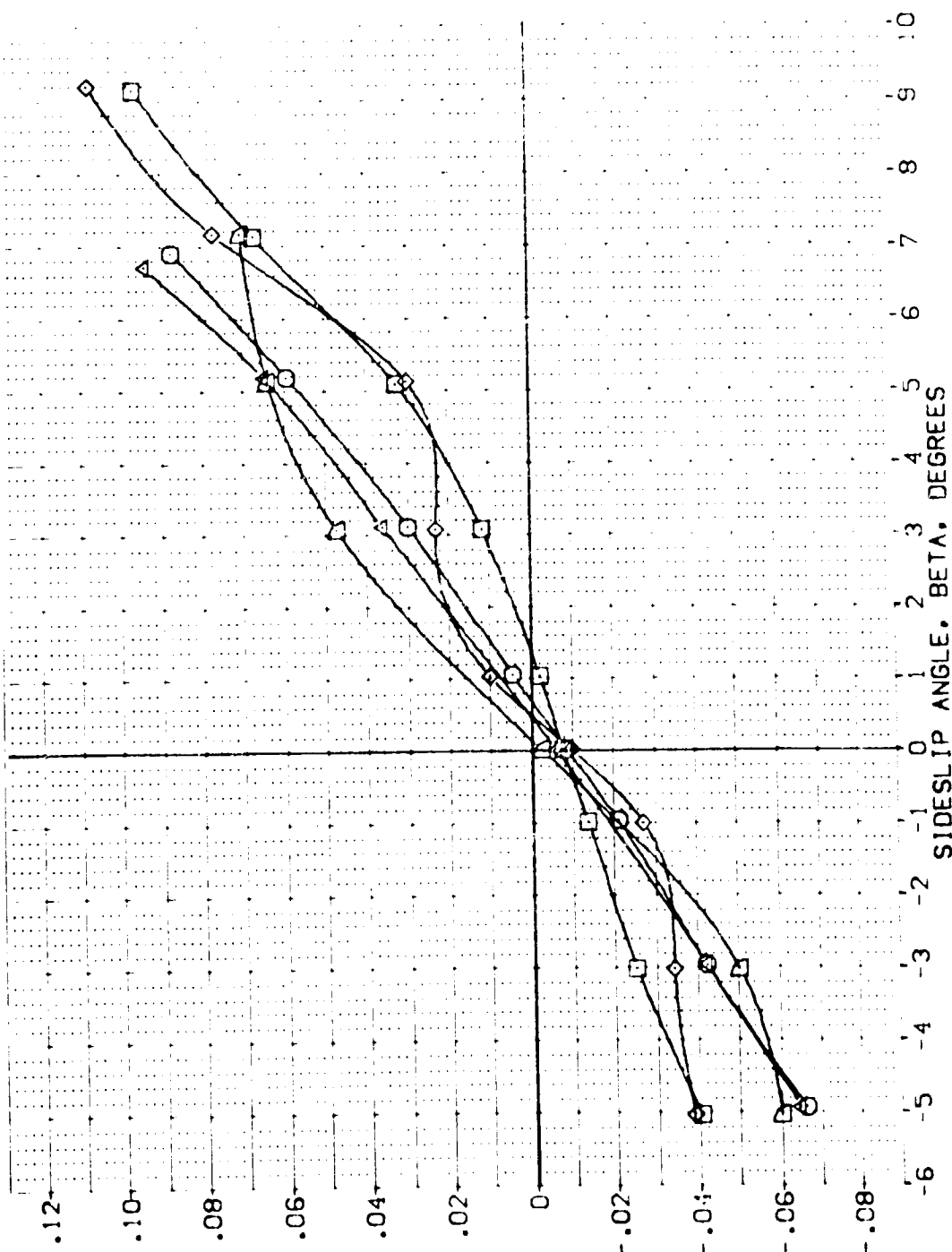


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOC LAP	SPOBRK	REFERENCE INFORMATION
Q	ABC 11-747 B-53A B C H F V	.000	.000	-11.700	25.000	SPREF 2.4210 SQ.FT.
Q	ABC 11-747 B-53A B C H F V	10.000	.000	-11.700	25.000	DRF 14.240
Q	ABC 11-747 B-53A B C H F V	20.000	.000	-11.700	25.000	SPREF 28.1004
Q	ABC 11-747 B-53A B C H F V	10.000	.000	-11.700	55.000	YREF 31.3010
Q	ABC 11-747 B-53A B C H F V	20.000	.000	-11.700	55.000	YREF 11.7500
Q	DATA NOT AVAILABLE					SCALE .0300

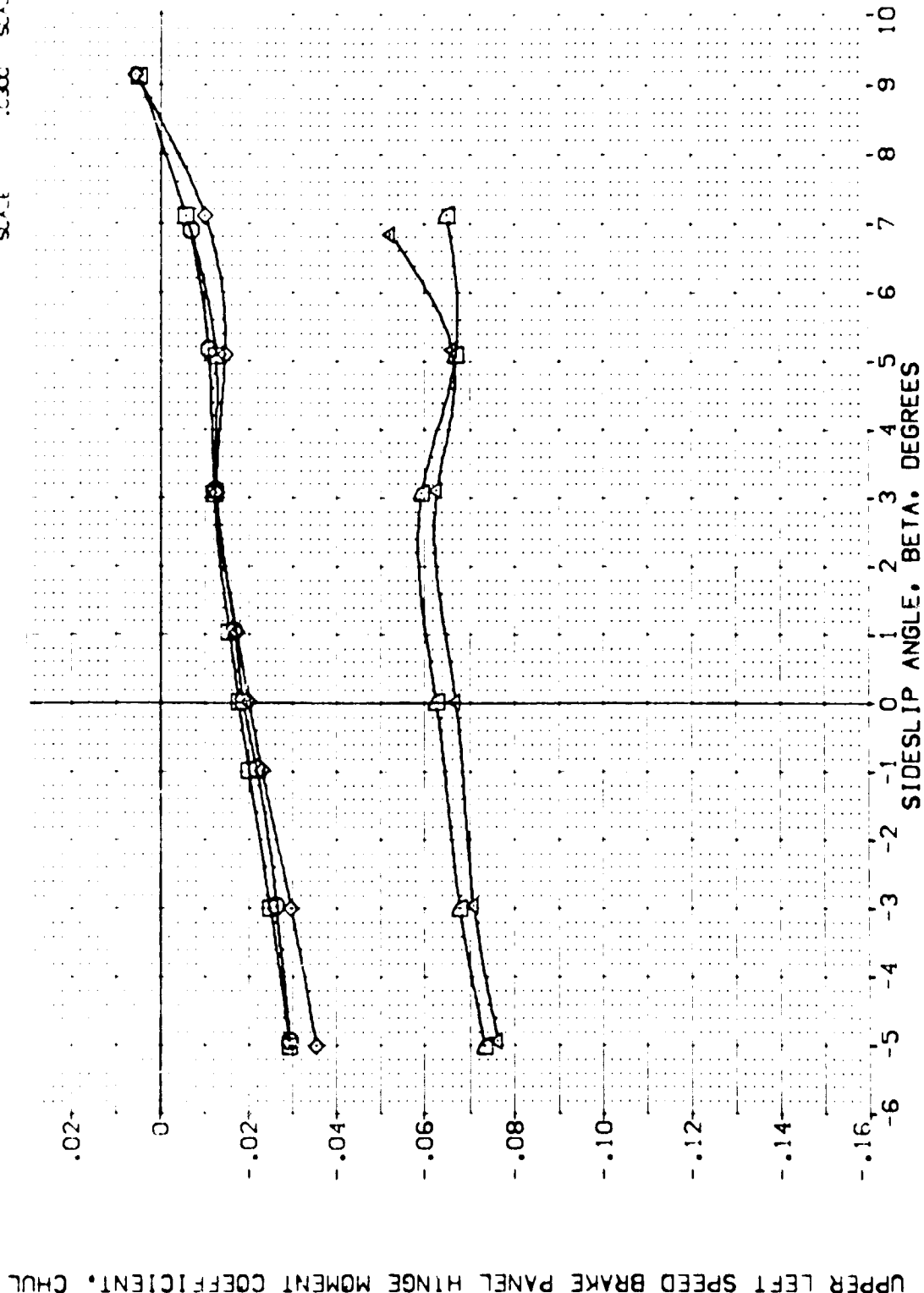


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(A)MAC = .60

DATA SET SYMBOL: 00042

CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPDRBK	REFERENCE INFORMATION
ARC 11-747 DASSA B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SC.F.T.
ARC 11-747 DASSA B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440
ARC 11-747 DASSA B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.0004
DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	XREF 32.3010
DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YREF 11.5000
DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZREF 11.5000

SCALE

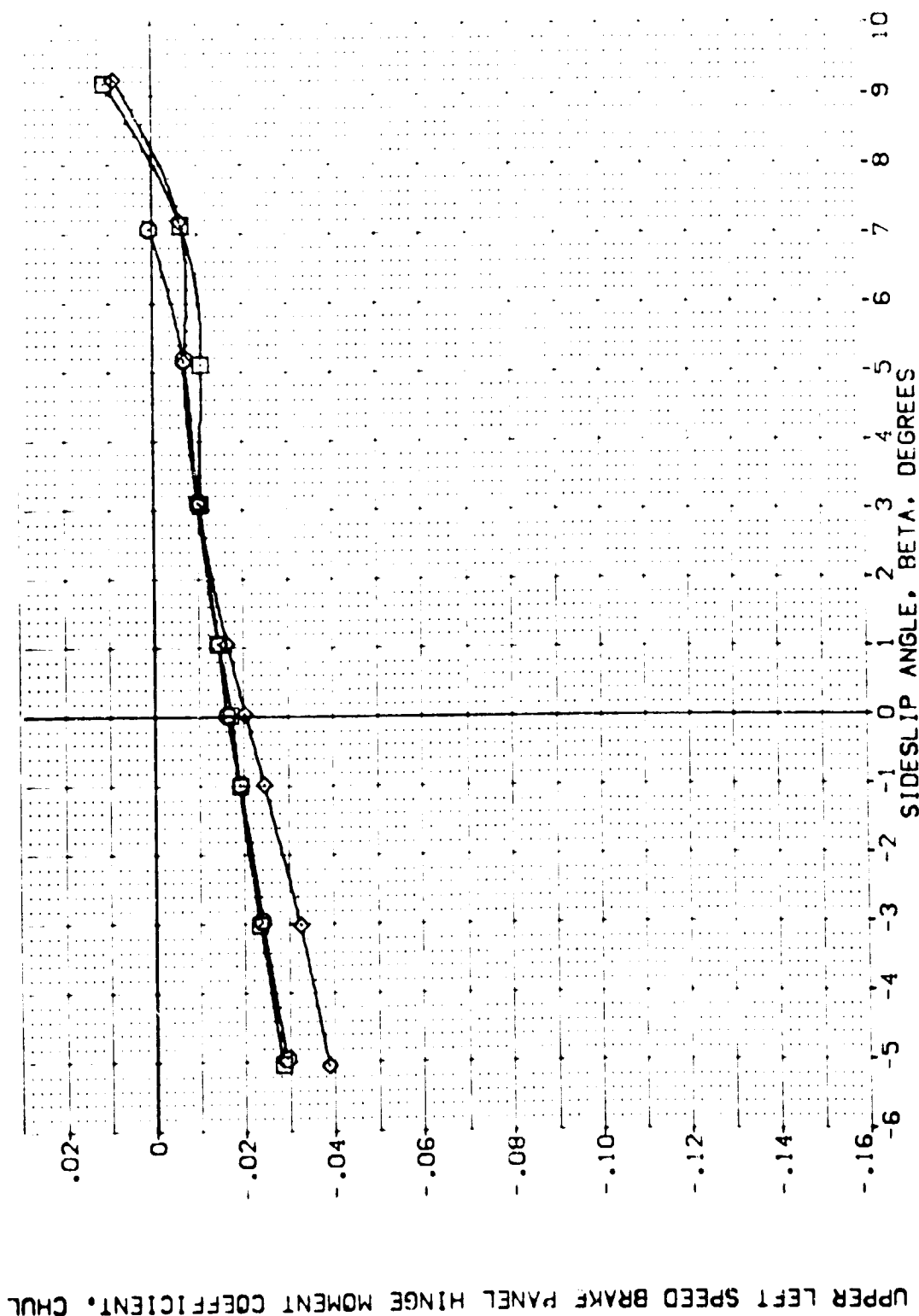


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(B)MACH = .80







DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	EDSLAP	SPDRBK	REFERENCE INFORMATION
(VE012)	ARC 11-747 DA53A B C H F V	.000	.000	-11.700	25.000	2.4210 SQ. FT.
(VE013)	ARC 11-747 DA53A B C H F V	10.000	.000	-11.700	25.000	14.2440
(VE014)	ARC 11-747 DA53A B C H F V	20.000	.000	-11.700	25.000	28.1004
(VE055)	DATA NOT AVAILABLE	.000	.000	-11.700	55.000	32.3010
(VE056)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	11.2500
(VE057)	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	.0300 SCALE

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

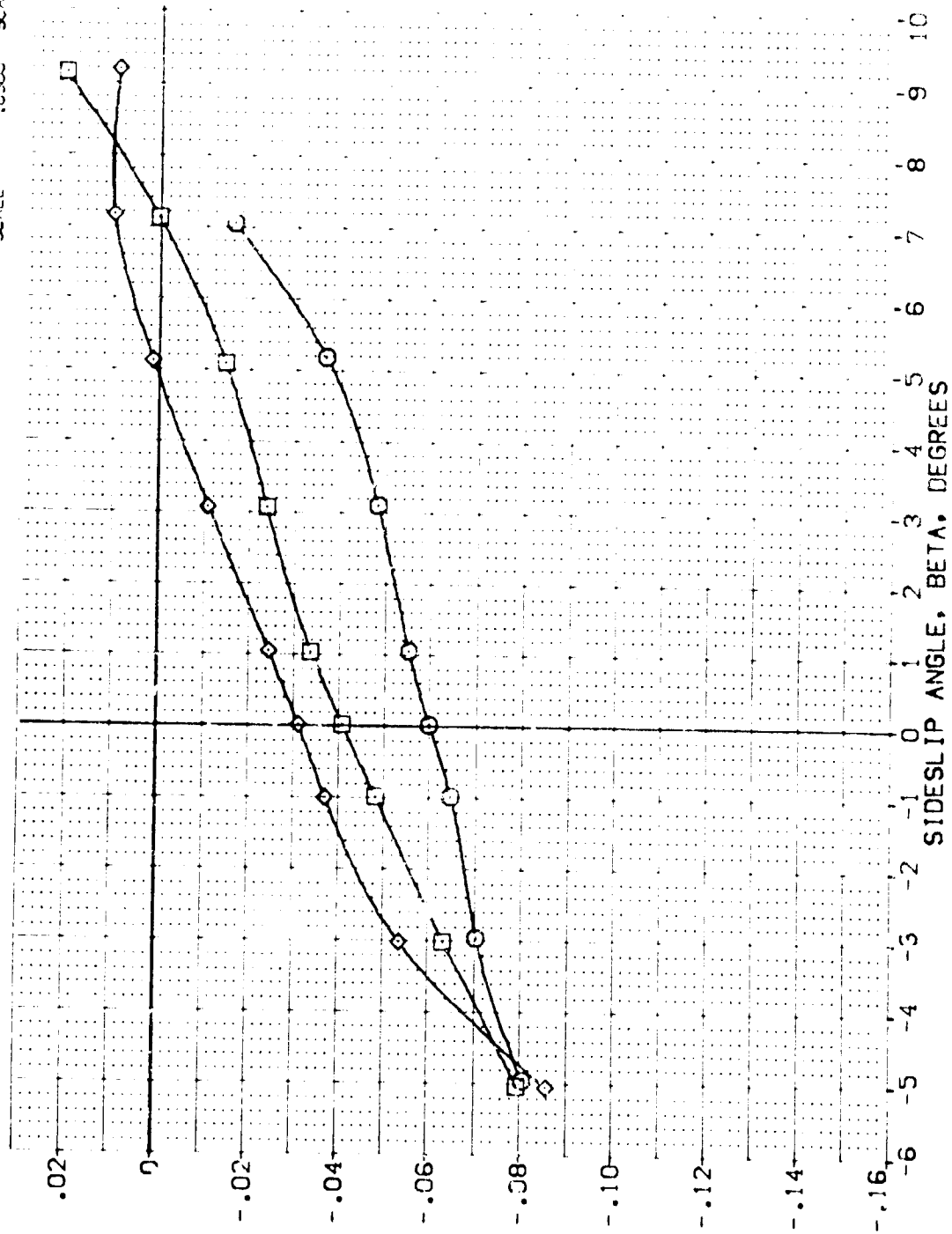


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(D)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
YEC12	□	ARC 11-747 BA53A B C M F V	.000	.000	-11.700	25.000	SREF 2.4210 SCLET.
YEC13	×	ARC 11-747 BA53A B C M F V	10.000	.000	-11.700	25.000	LREF 14.2440
YEC14	△	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	25.000	BRF 28.1304
YEC15	○	ARC 11-747 BA53A B C M F V	10.000	.000	-11.700	55.000	YREF 32.3010
YEC16	◇	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YREF 32.3010
YEC17	◇	ARC 11-747 BA53A B C M F V	20.000	.000	-11.700	55.000	YREF 32.3010

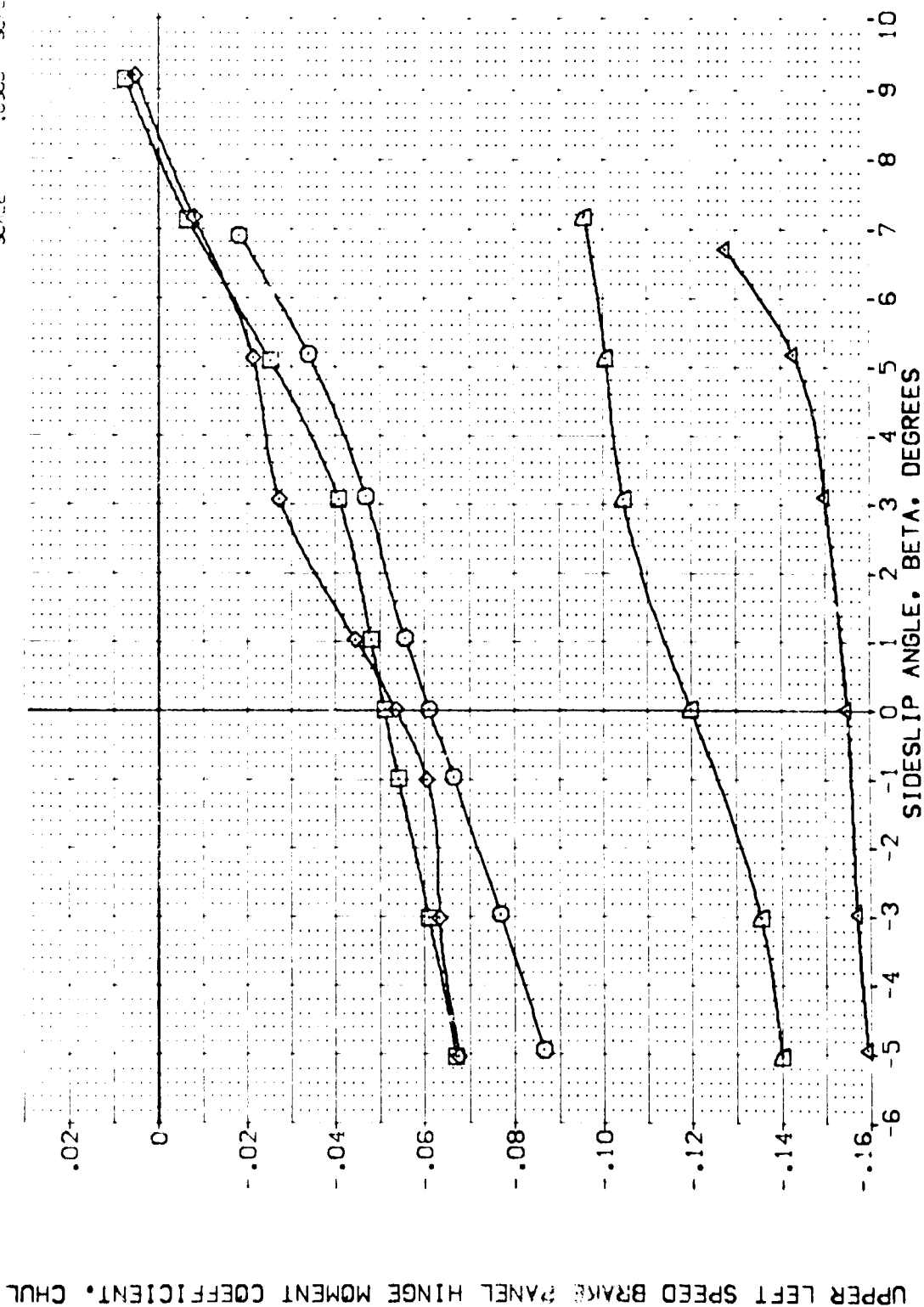


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOFLAP SPEED REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[YEJ012]	ARC 11-747 DA53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SC.F.T.
[YEJ013]	ARC 11-747 DA53A B C M F V1 V	10.000	.000	-11.700	25.000	LREF 14.2440
[YEJ014]	ARC 11-747 DA53A B C M F V1 V	20.000	.000	-11.700	25.000	BREF 28.1000
[YEJ055]	ARC 11-747 DA53A B C M F V1 V	10.000	.000	-11.700	55.000	XMRP 32.3010
[YEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP .0000
[YEJ057]	ARC 11-747 DA53A B C M F V1 V	20.000	.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

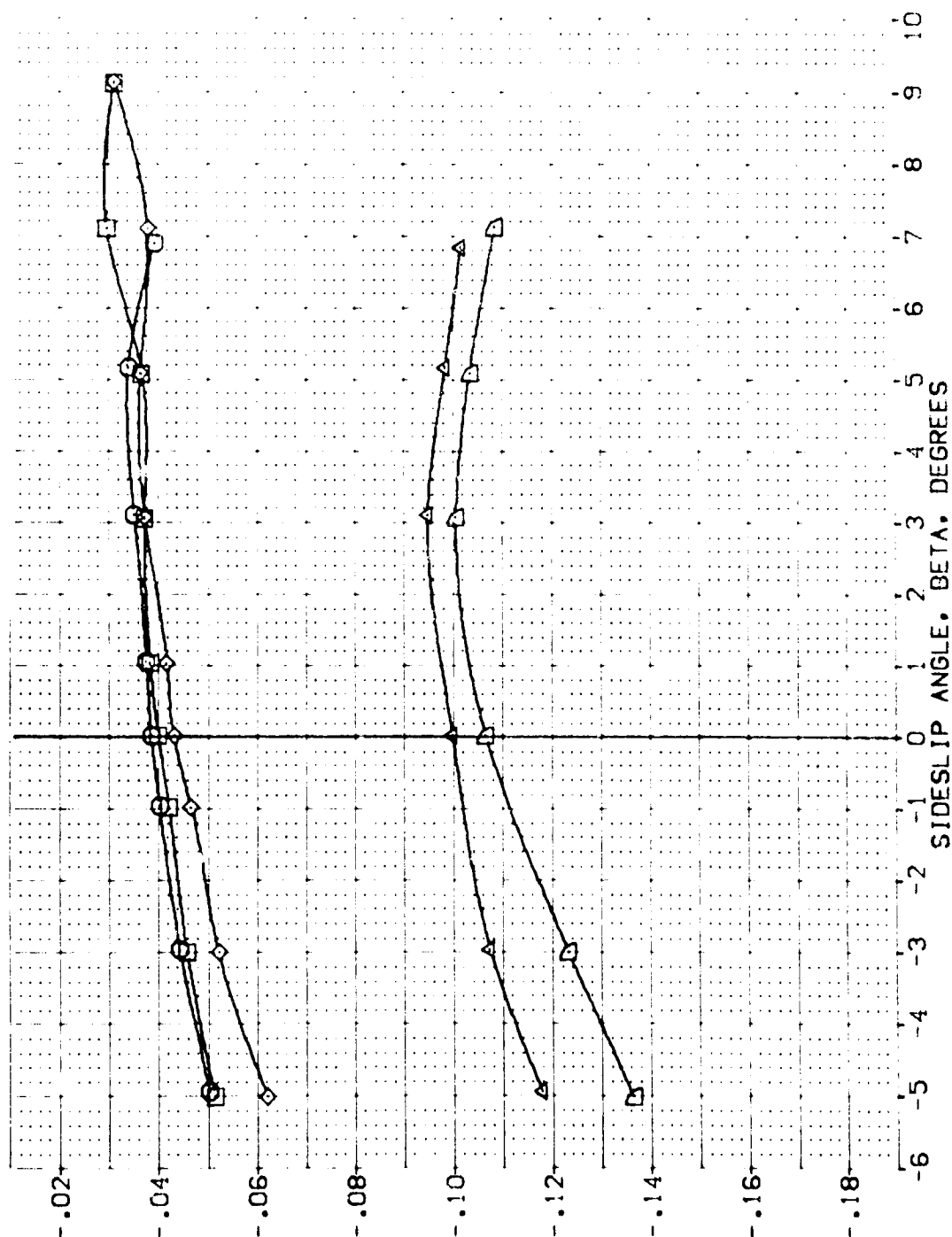


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION / DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDBRK	REFERENCE INFORMATION
[YEU012]	ARC 11-74T D453A B C M F V	.000	.000	-11.700	25.000	SREF 2.4210 SC.FT.
[YEU013]	ARC 11-74T D453A B C M F V	10.000	.000	-11.700	25.000	LREF 14.2440
[YEU014]	ARC 11-74T D453A B C M F V	20.000	.000	-11.700	25.000	BREF 28.1004
[YEU015]	DATA NOT AVAILABLE	10.000	.000	-11.700	25.000	XMRD 32.9010
[YEU016]	DATA NOT AVAILABLE	20.000	.000	-11.700	25.000	YMRD 0.000
[YEU017]	DATA NOT AVAILABLE				25.000	ZMRD 11.7500
						SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

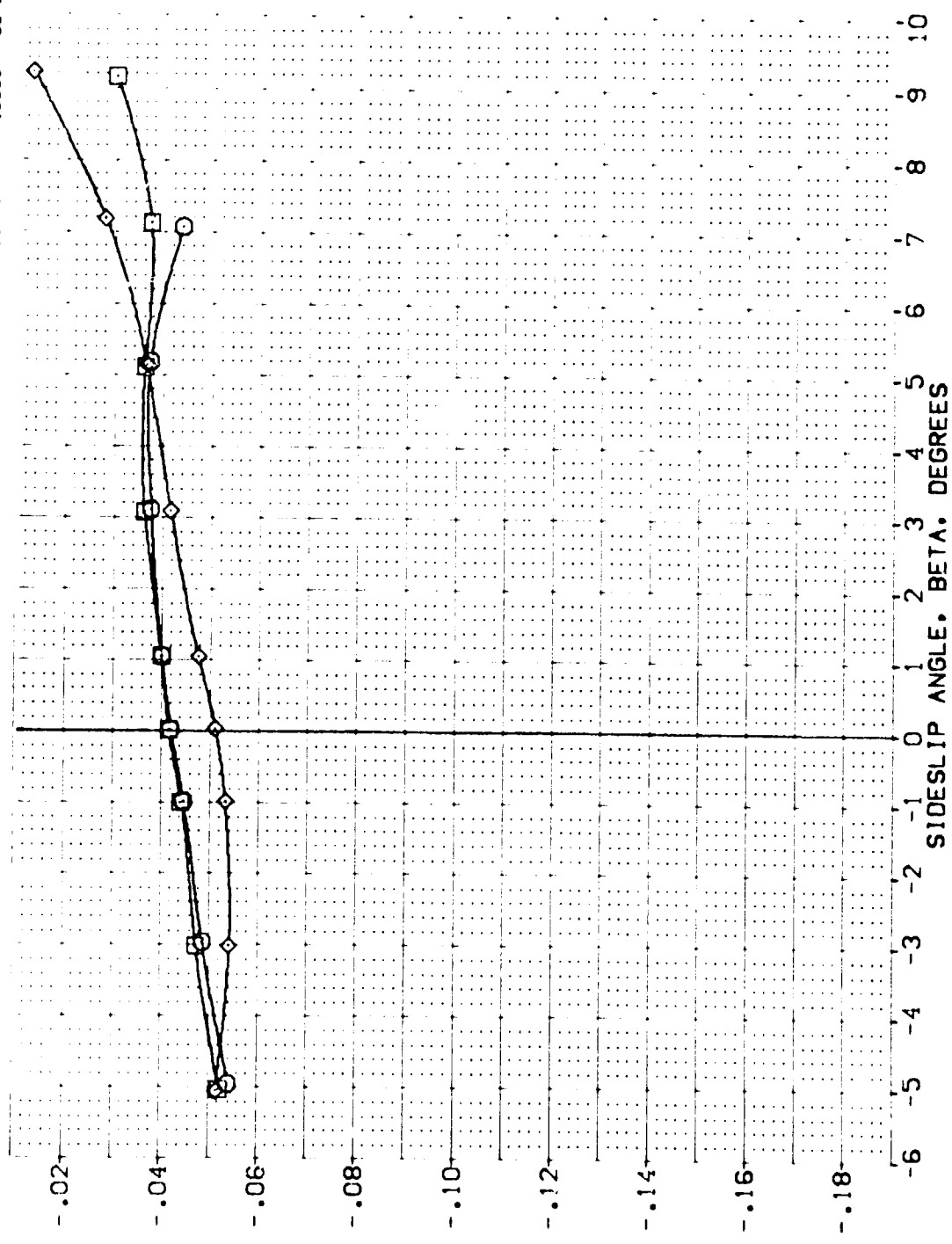


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 OAS3A B C M F VI V	0.000	0.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ013]	ARC 11-747 OAS3A B C M F VI V	10.000	0.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ014]	ARC 11-747 OAS3A B C M F VI V	20.000	0.000	-11.700	25.000	BREF 28.1001 IN.
[VEJ056]	ARC 11-747 OAS3A B C M F VI V	0.000	0.000	-11.700	55.000	XMRP 37.3010 IN.
[VEJ056]	ARC 11-747 OAS3A B C M F VI V	10.000	0.000	-11.700	55.000	YMRP 0.0000 IN.
[VEJ057]	ARC 11-747 OAS3A B C M F VI V	20.000	0.000	-11.700	55.000	ZMRP 11.7500 IN.
						SCALE 0.000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

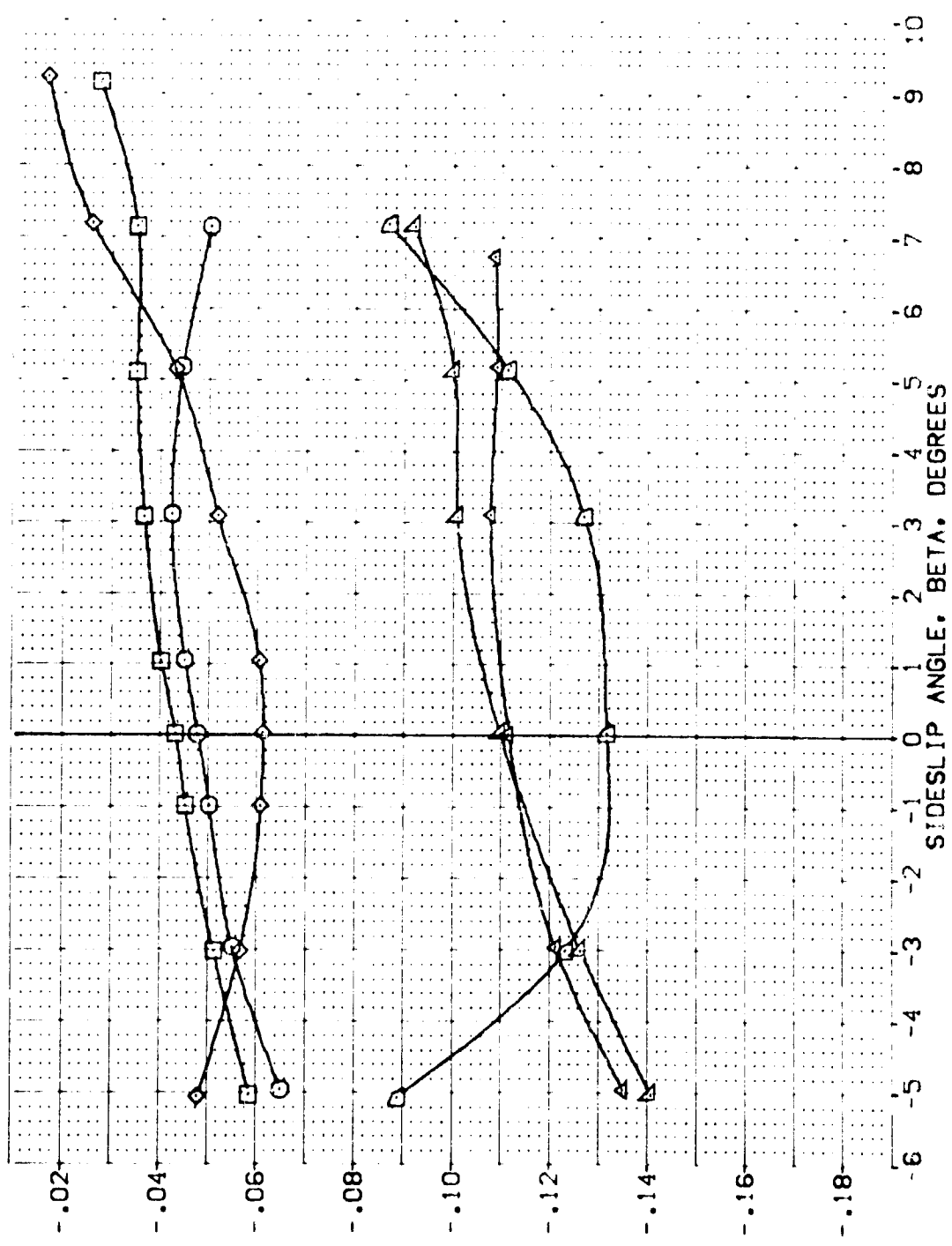


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 0A53A B C M F V V	.000	.000	-11.700	25.000	SREF 2.4210 SO.FT.
[VEJ013]	ARC 11-747 0A53A B C M F V V	10.000	.000	-11.700	25.000	LREF 14.2440
[VEJ014]	ARC 11-747 0A53A B C M F V V	20.000	.000	-11.700	25.000	BREF 28.1004
[VEJ015]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	XMRP 32.3010
[VEJ016]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP .0000
[VEJ017]	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

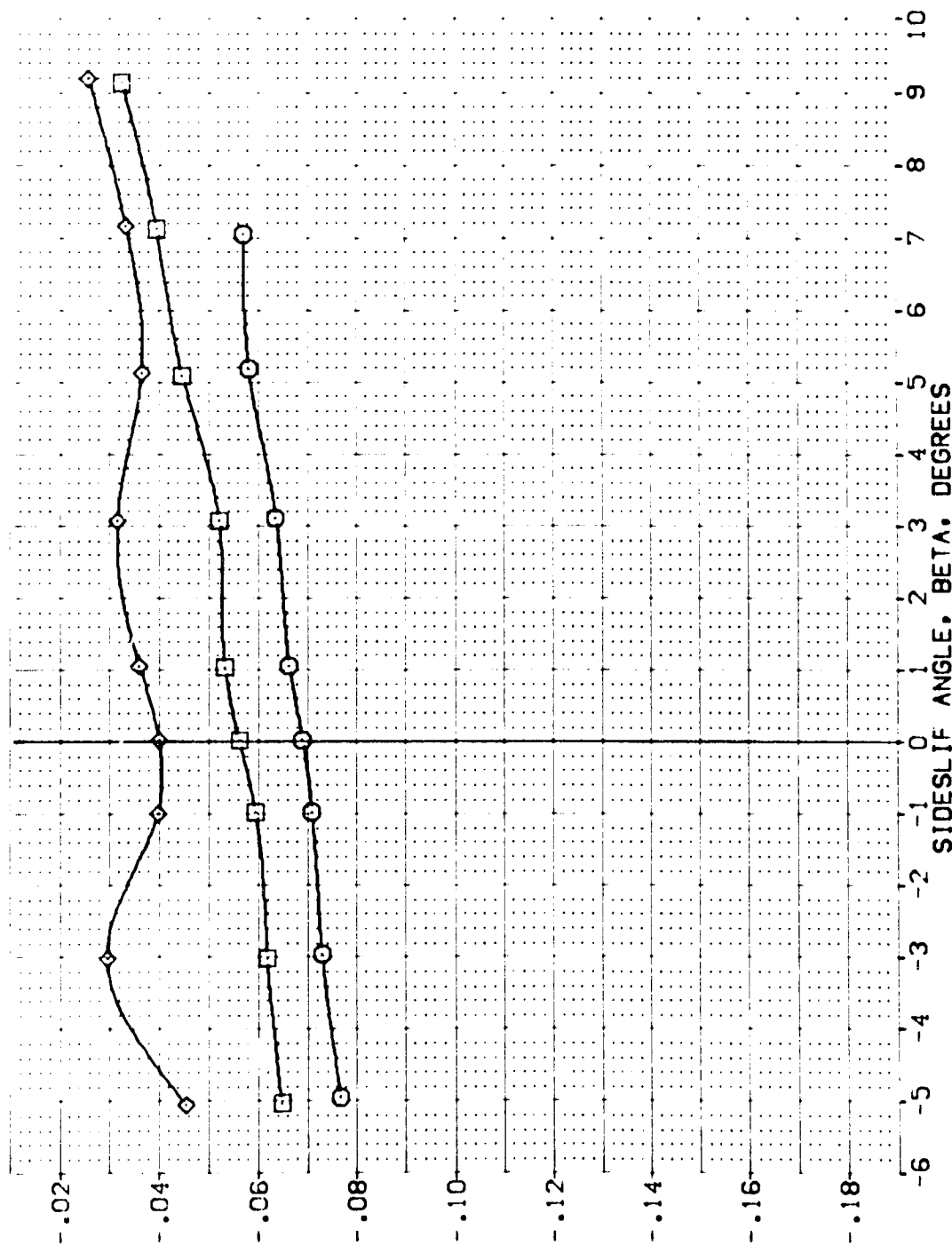


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(O)MACH = 1.05

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHL

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOLAP	SPOBRK	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 BAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ013]	ARC 11-747 BAS3A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ014]	ARC 11-747 BAS3A B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ055]	ARC 11-747 BAS3A B C H F VI V	10.000	.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP 11.2500 IN.
[VEJ057]	ARC 11-747 BAS3A B C H F VI V	20.000	.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300 SCALE

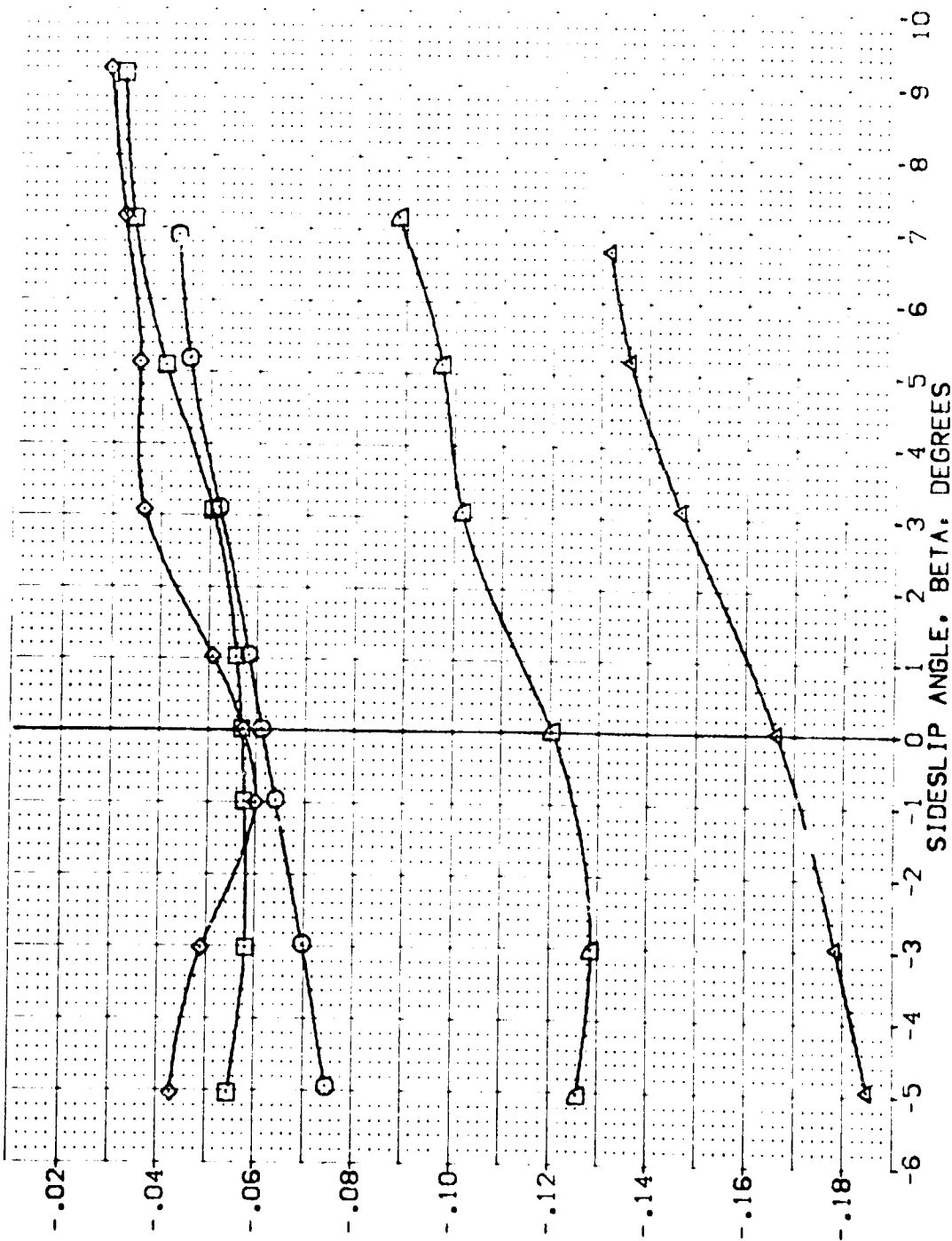


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(CJMACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOF LAP	SPOBRK	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ013]	ARC 11-747 D453A B C M F V1 V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ014]	ARC 11-747 D453A B C M F V1 V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ055]	ARC 11-747 D453A B C M F V1 V	.000	.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP 11.7500 IN.
[VEJ057]	ARC 11-747 D453A B C M F V1 V	20.000	.000	-11.700	55.000	ZMRP 11.7500 IN.
					SCALE	SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

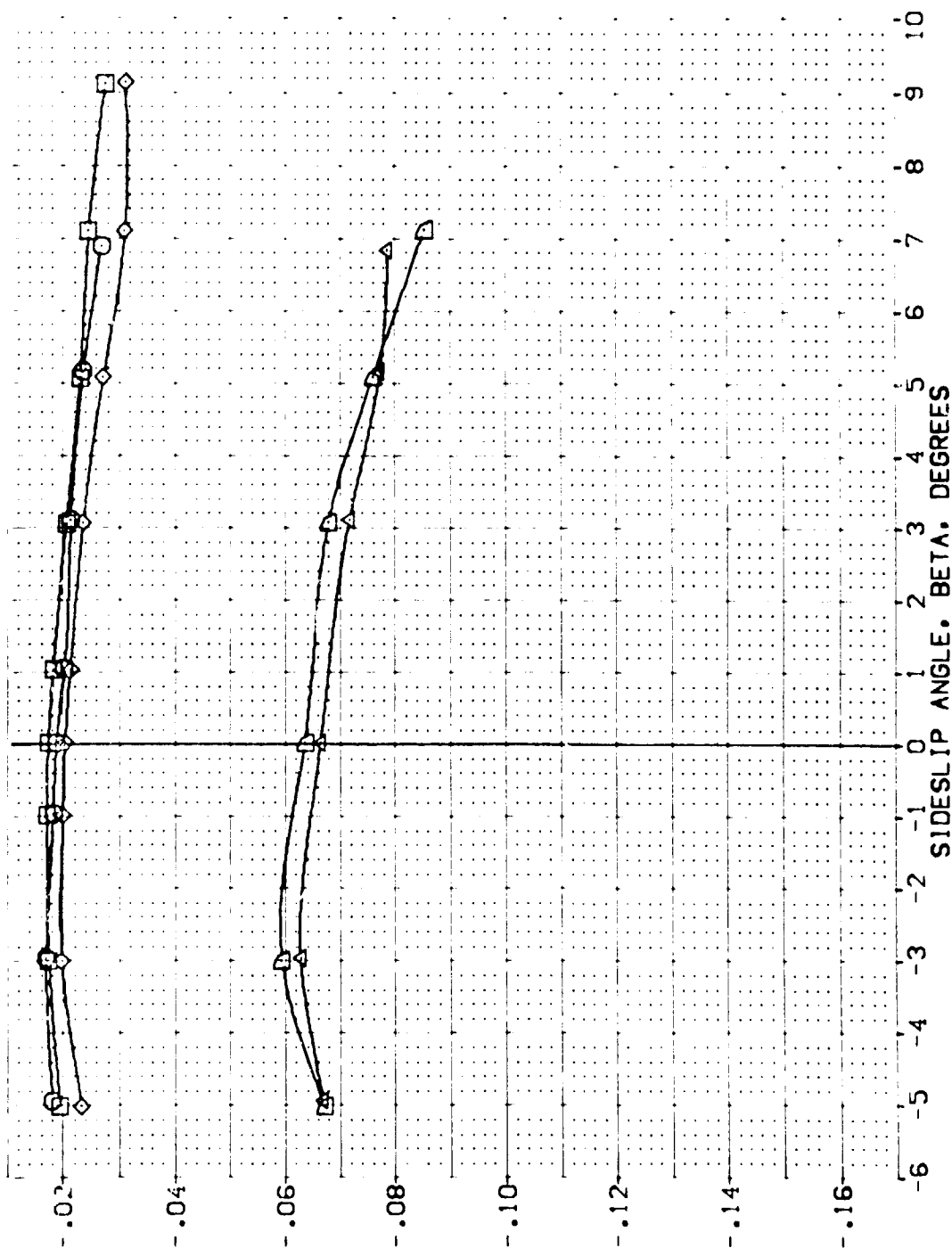


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDBRK	REFERENCE INFORMATION
[YE4012]	ARC 11-747 DASSA B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[YE4013]	ARC 11-747 DASSA B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440
[YE4014]	ARC 11-747 DASSA B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1004
[YE4055]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	XMRP 32.3010
[YE4056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP 11.0000
[YE4057]	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

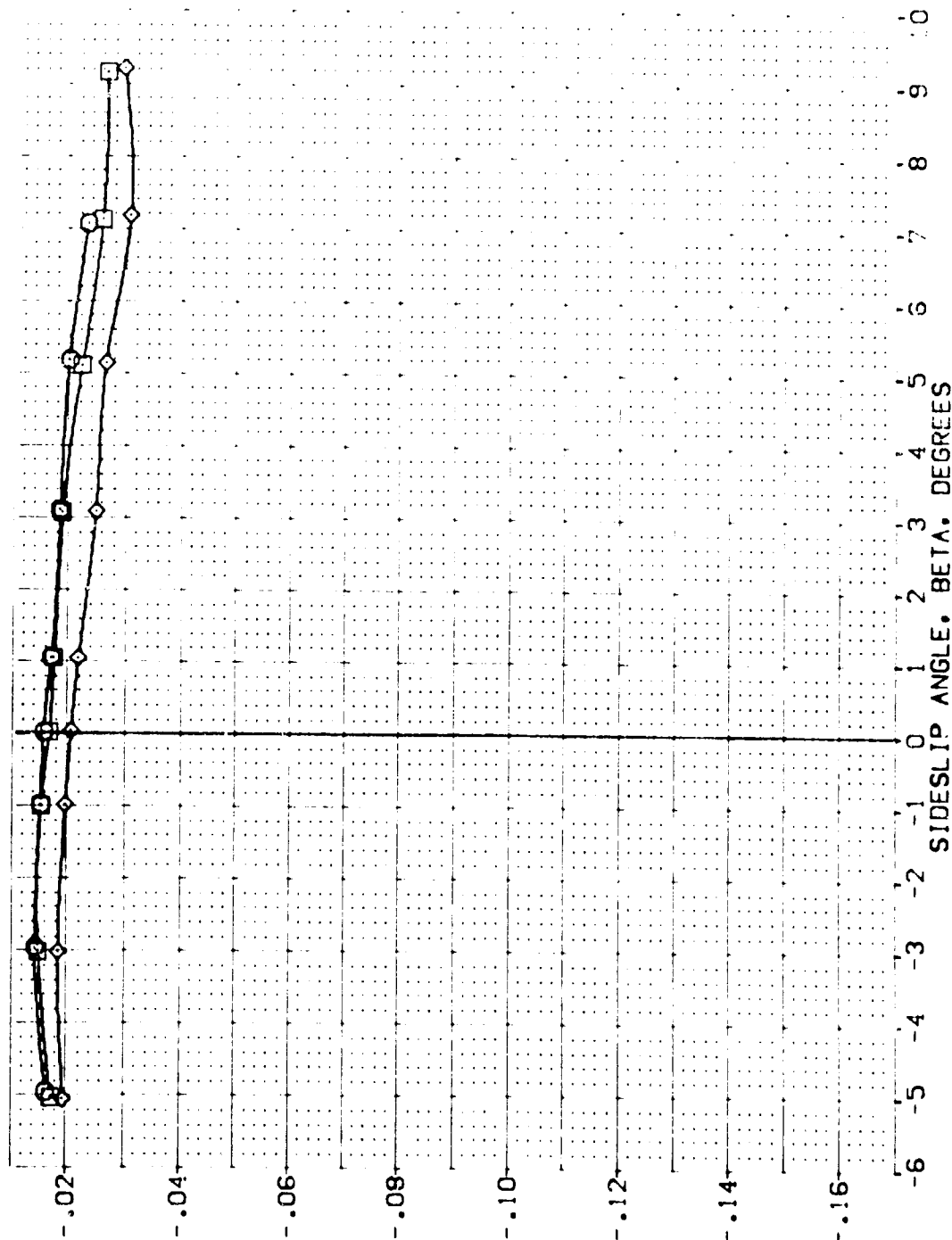


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
(VEJ012)	ARC 11-747 CAS3A B C M F V	.000	.000	-11.700	25.000	SREF 2.421C SQ.FT.
(VEJ013)	ARC 11-747 CAS3A B C M F V	10.000	.000	-11.700	25.000	LRFF 14.244C
(VEJ014)	ARC 11-747 CAS3A B C M F V	20.000	.000	-11.700	25.000	BRFF 28.100A
(VEJ055)	ARC 11-747 CAS3A B C M F V	10.000	.000	-11.700	55.000	XMRP 32.301C
(VEJ056)	ARC 11-747 CAS3A B C M F V	20.000	.000	-11.700	55.000	YMRP .000C
(VEJ057)	ARC 11-747 CAS3A B C M F V	20.000	.000	-11.700	55.000	ZMRP 11.500C
						SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

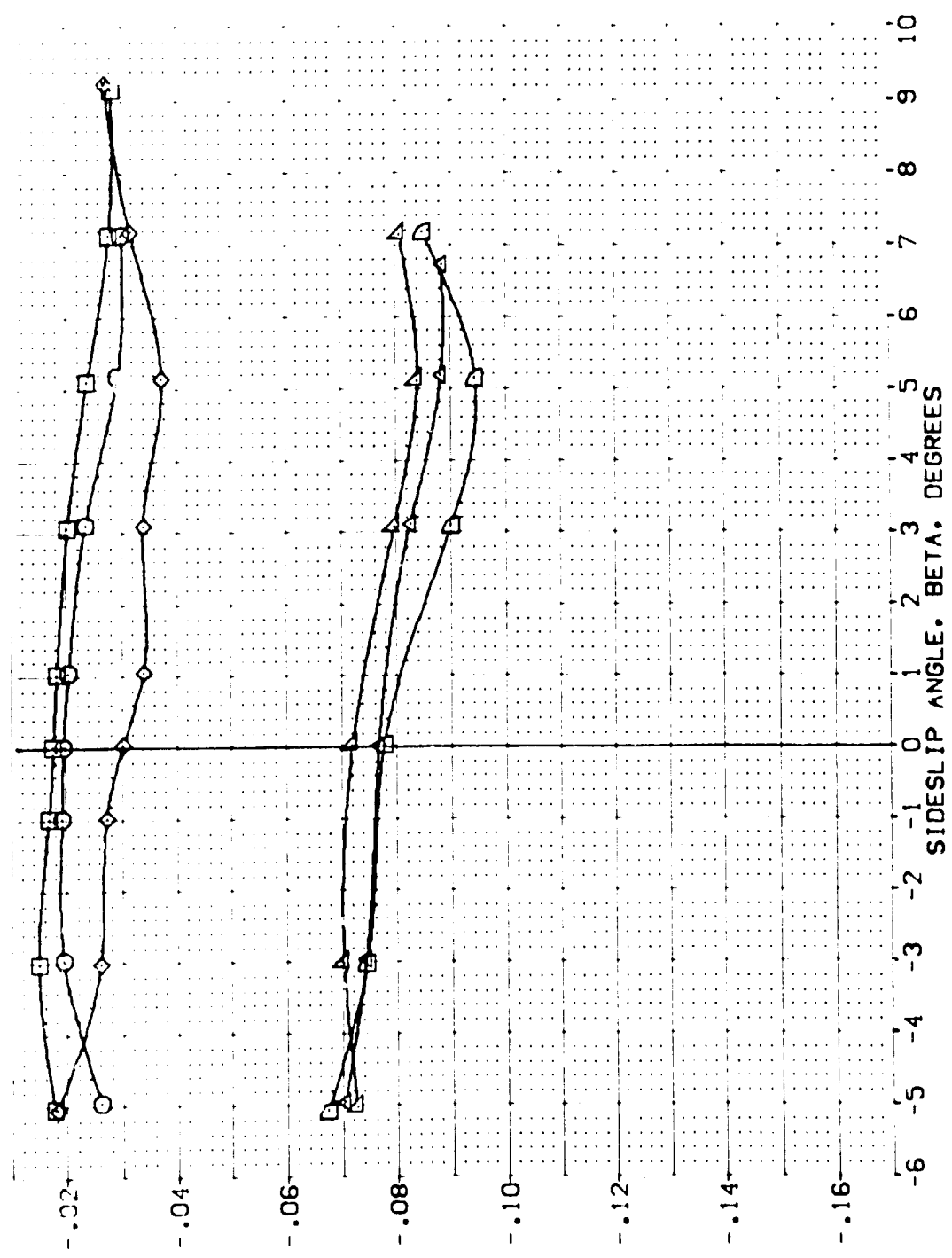


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[YEJ012]	ARC 11-747 BA53A B C H F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YEJ013]	ARC 11-747 BA53A B C H F V1 V	10.000	.000	-11.700	25.000	LREF 14.2440
[YEJ014]	ARC 11-747 BA53A B C H F V1 V	20.000	.000	-11.700	25.000	BREF 28.1004
[YEJ055]	DATA NOT AVAILABLE	.000	.000	-11.700	55.000	XMRP 32.3000
[YEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP .0000
[YEJ057]	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZMRP .0000
						SCALE 11.5000

UPPER RIGHT SPEED BRAKE HINGE MOMENT COEFFICIENT, CHUR

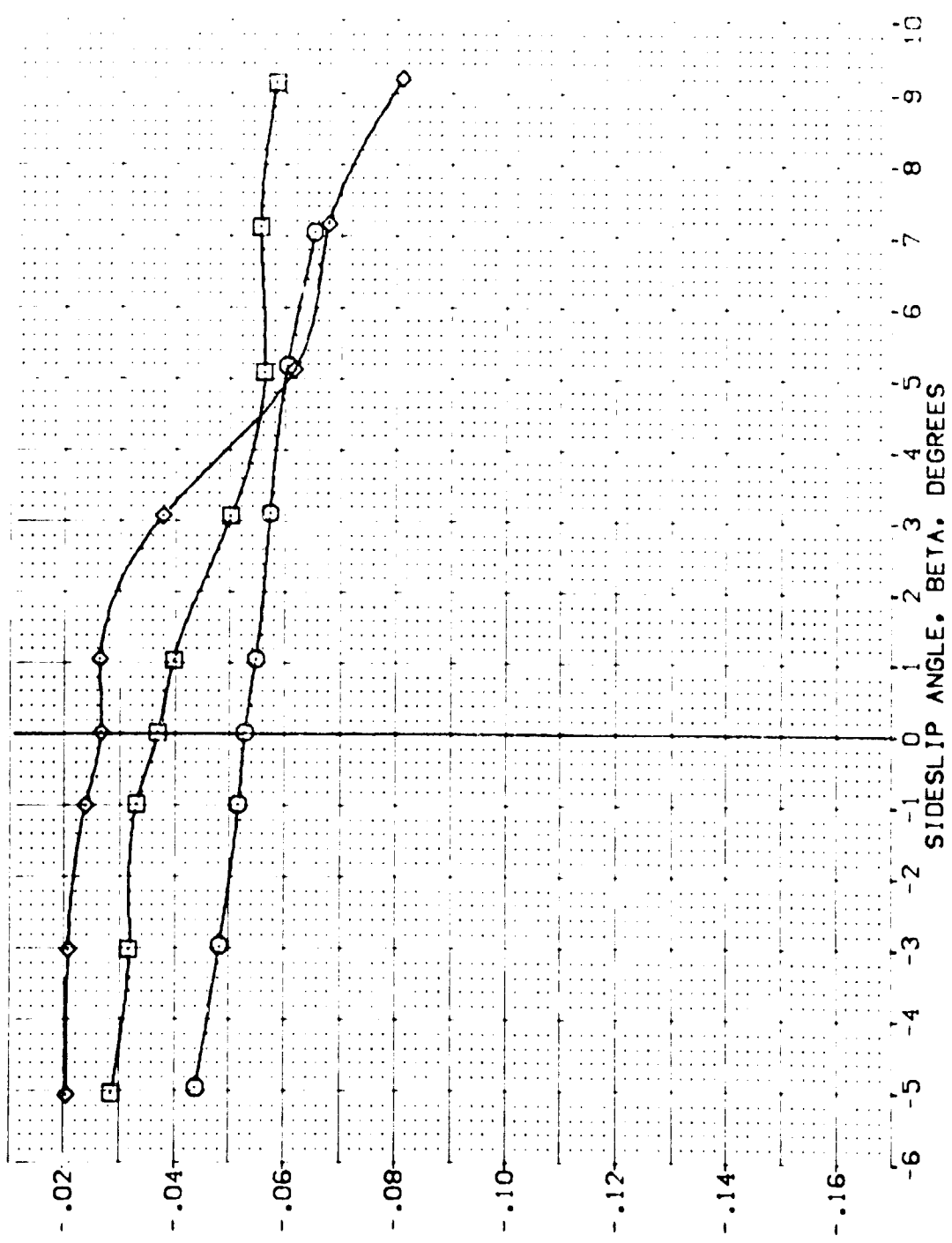


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(O)MACr = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
Q	ARC 11-747 0A53A B C H F V	.000	.000	-11.700	25.000	SPREF 2.4210 SQ. FT.
X	ARC 11-747 0A53A B C H F V	10.000	.000	-11.700	25.000	LRREF 14.2440
Y	ARC 11-747 0A53A B C H F V	20.000	.000	-11.700	25.000	BRREF 28.1000
Z	ARC 11-747 0A53A B C H F V	10.000	.000	-11.700	55.000	XREF 32.3000
W	ARC 11-747 0A53A B C H F V	20.000	.000	-11.700	55.000	YREF 11.5000
V	ARC 11-747 0A53A B C H F V	20.000	.000	-11.700	55.000	SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

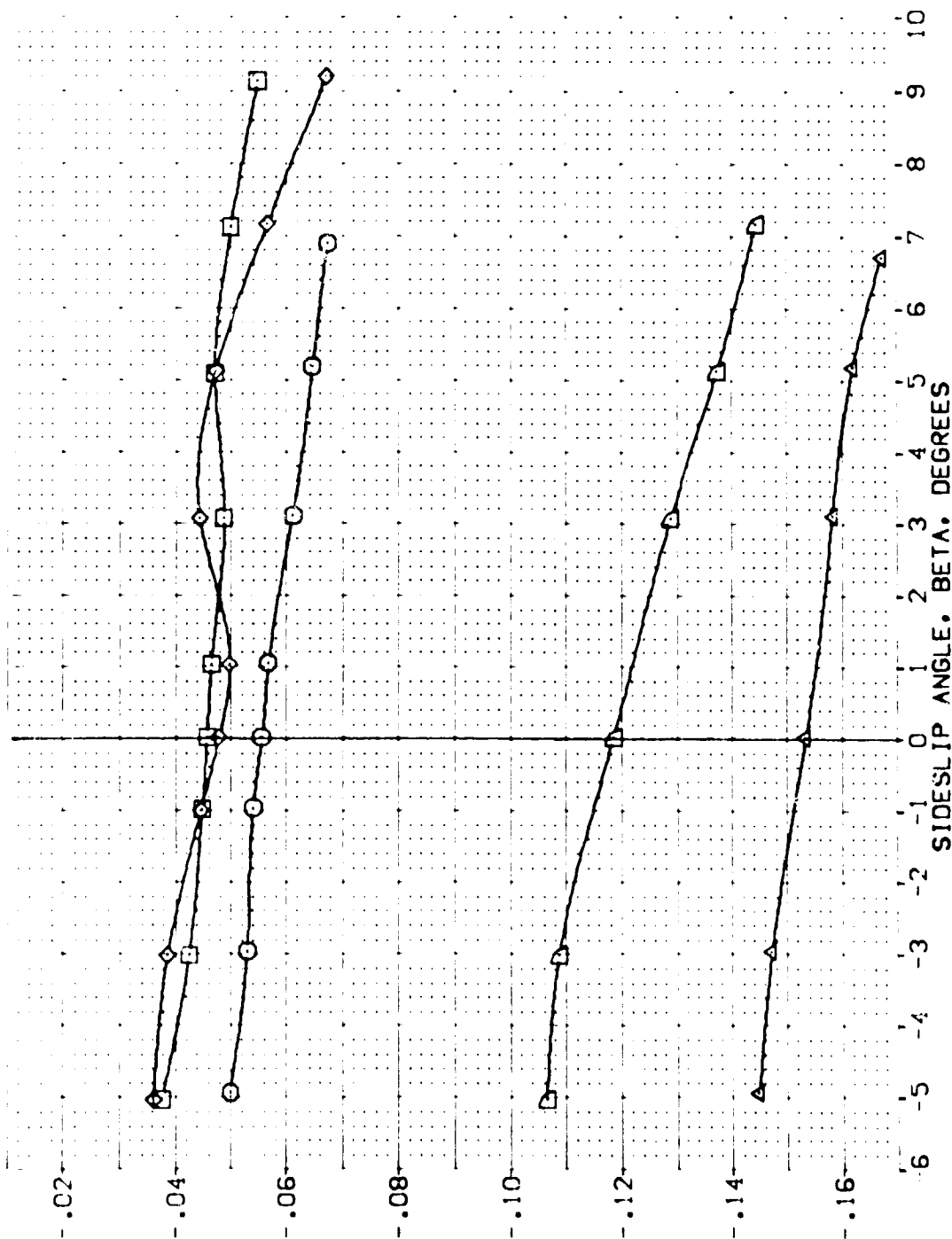


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(CD)MACH = 1.20

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPEED	REFERENCE INFORMATION
ARC 11-747 CAS3A B C M F V I V	ARC 11-747 CAS3A B C M F V I V	.000	.000	-11.700	25.000	2.4710
VEJ012	VEJ012	10.000	.000	-11.700	25.000	14.7440
VEJ013	VEJ013	20.000	.000	-11.700	25.000	28.0004
VEJ014	VEJ014	10.000	.000	-11.700	55.000	32.9700
VEJ055	VEJ055	10.000	.000	-11.700	55.000	11.7500
VEJ056	VEJ056	20.000	.000	-11.700	55.000	11.0300
VEJ057	VEJ057	20.000	.000	-11.700	55.000	SCALE

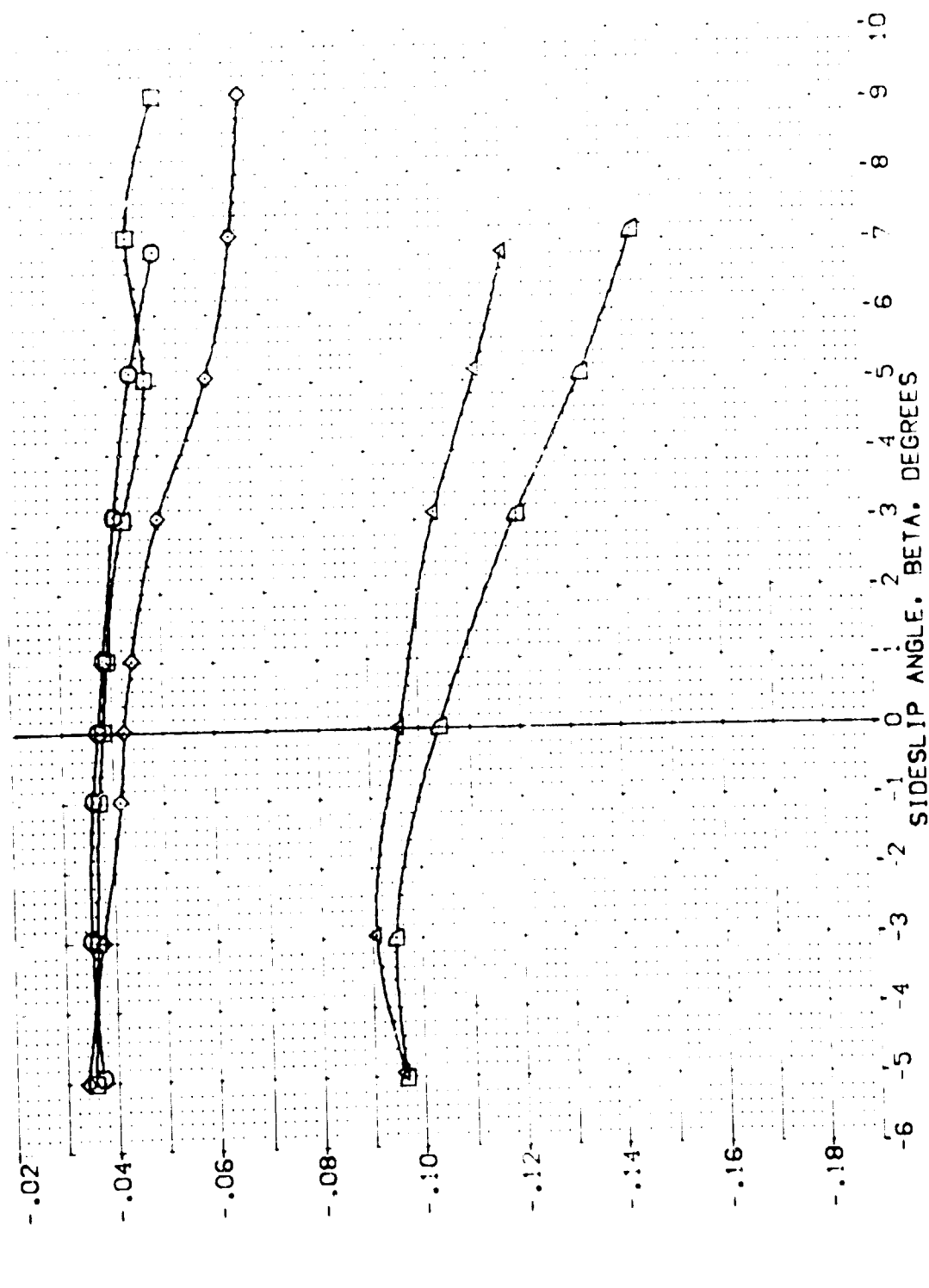


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(A)MAC = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOL LAR	SPOBRY	REFERENCE INFORMATION
VEJ012	Q	ARC 11-747 CAS3A B C M F VI V	.000	.000	-11.700	75.000	SREF 2.4210
VEJ013	Q	ARC 11-747 CAS3A B C M F VI V	10.000	.000	-11.700	75.000	LRP 14.2440
VEJ014	Q	ARC 11-747 CAS3A B C M F VI V	20.000	.000	-11.700	75.000	BRP 28.1004
VEJ015	Q	DATA NOT AVAILABLE	.000	.000	-11.700	55.000	VRP 31.3010
VEJ016	Q	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	VRP 31.3010
VEJ017	Q	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	VRP 31.3010
							SCALE 11.7000
							SCALE 55.000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, C<sub>HLR</sub>

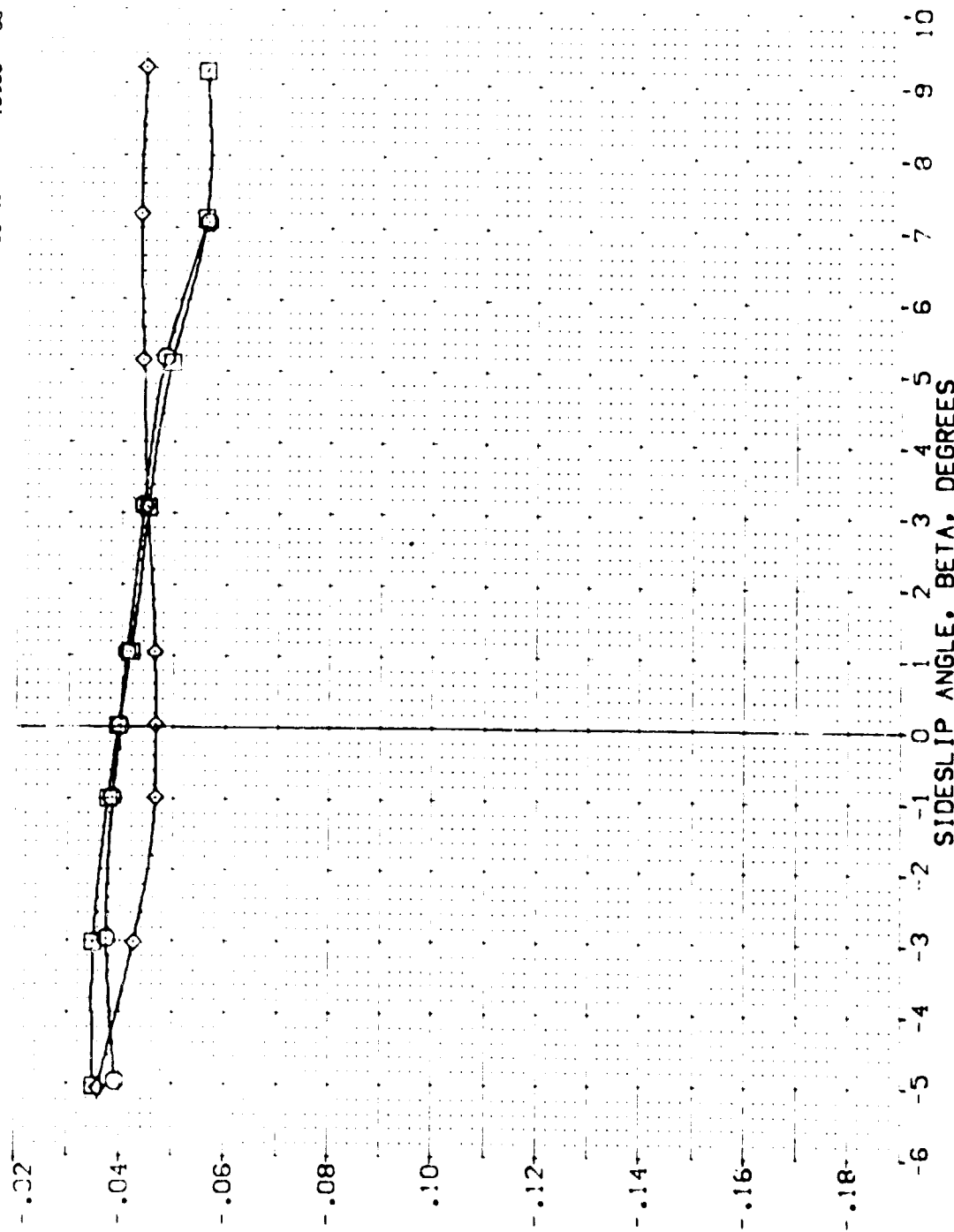


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDRBK	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 BA53A B C M F VI	.000	.000	-11.700	25.000	SREF 2.4310 SQ.FT.
[VEJ013]	ARC 11-747 BA53A B C M F VI	10.000	.000	-11.700	25.000	LOEF 14.2440 IN.
[VEJ014]	ARC 11-747 BA53A B C M F VI	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ055]	ARC 11-747 BA53A B C M F VI	.000	.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ056]	ARC 11-747 BA53A B C M F VI	10.000	.000	-11.700	55.000	YMRP .0000 IN.
[VEJ057]	ARC 11-747 BA53A B C M F VI	20.000	.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300

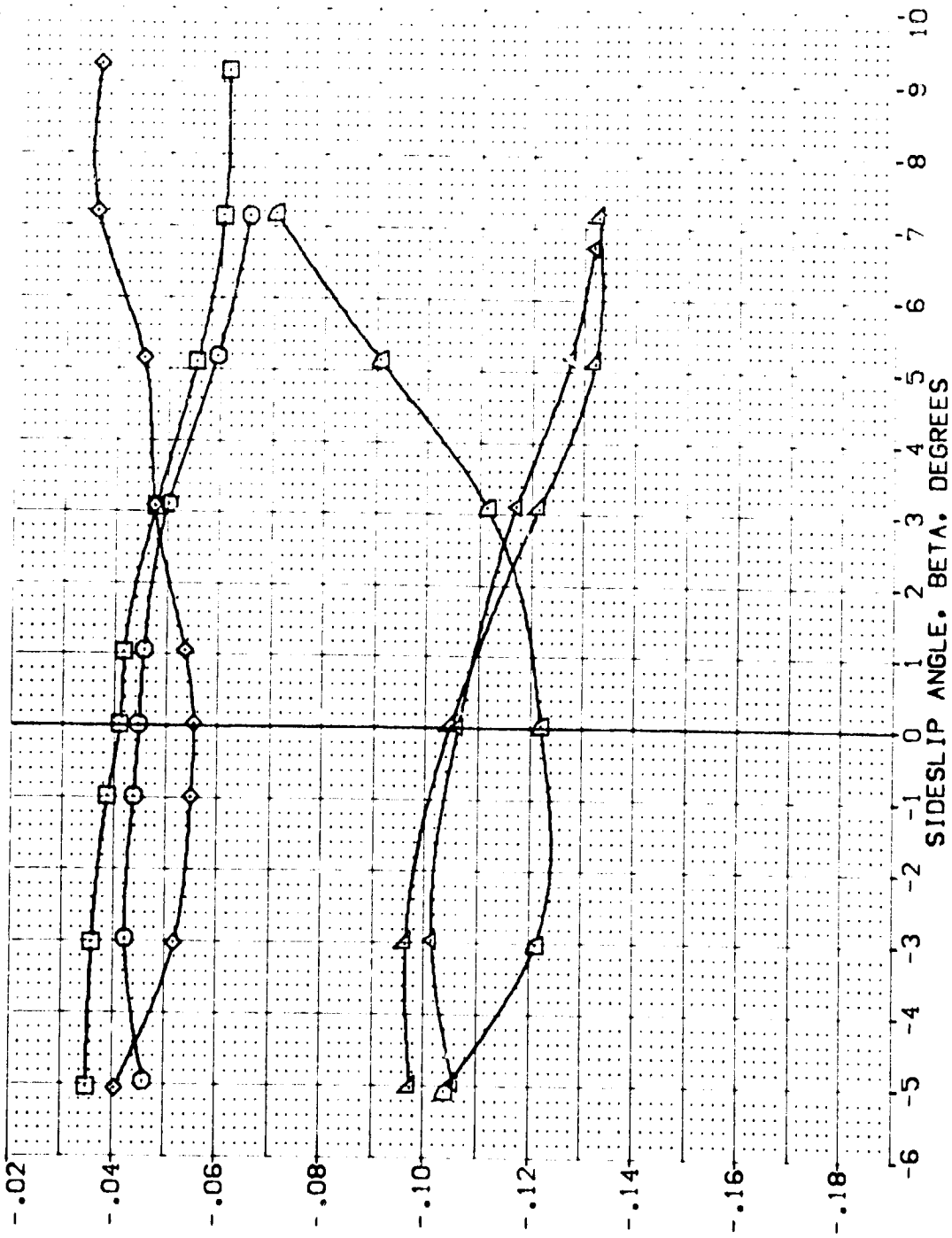


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YE2012]	ARC 11-747 CAS3A B C M F V V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE2013]	ARC 11-747 CAS3A B C M F V V	10.000	.000	-11.700	25.000	LREF 14.2440
[YE2014]	ARC 11-747 CAS3A B C M F V V	20.000	.000	-11.700	25.000	BREF 28.1004
[YE2055]	DATA NOT AVAILABLE	.000	.000	-11.700	55.000	XMRP 32.3010
[YE2056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	YMRP 11.7500
[YE2057]	DATA NOT AVAILABLE	20.000	.000	-11.700	55.000	ZMRP .0300 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT,  $C_{HRL}$

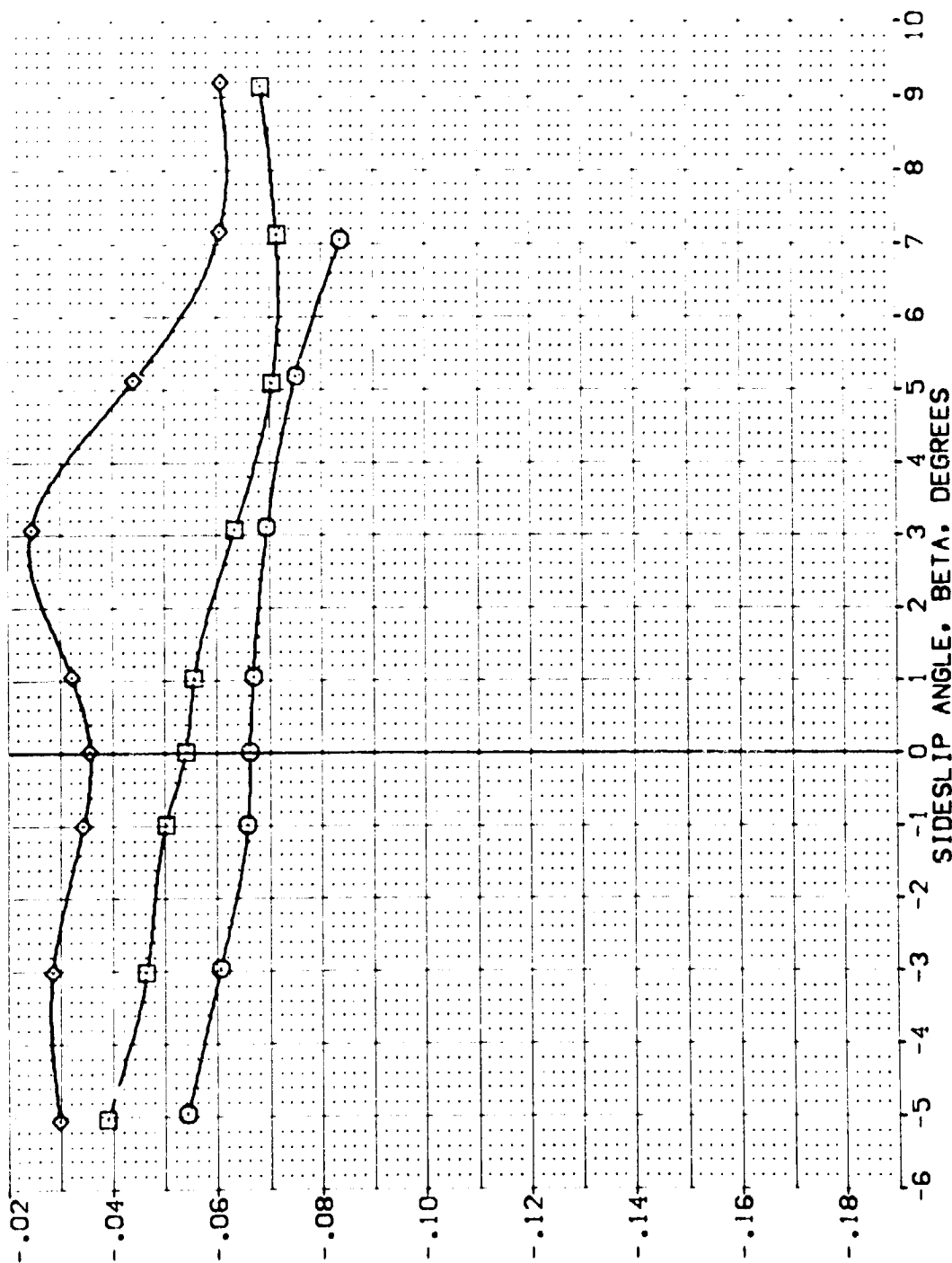


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ012]	ARC 11-747 QAS3A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SO.FT.
[VEJ013]	ARC 11-747 QAS3A B C M F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ014]	ARC 11-747 QAS3A B C M F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ055]	ARC 11-747 QAS3A B C M F VI V	10.000	.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ056]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	ZMRP .0000 IN.
[VEJ057]	ARC 11-747 QAS3A B C M F VI V	20.000	.000	-11.700	55.000	SCALE 11.2500 IN.

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

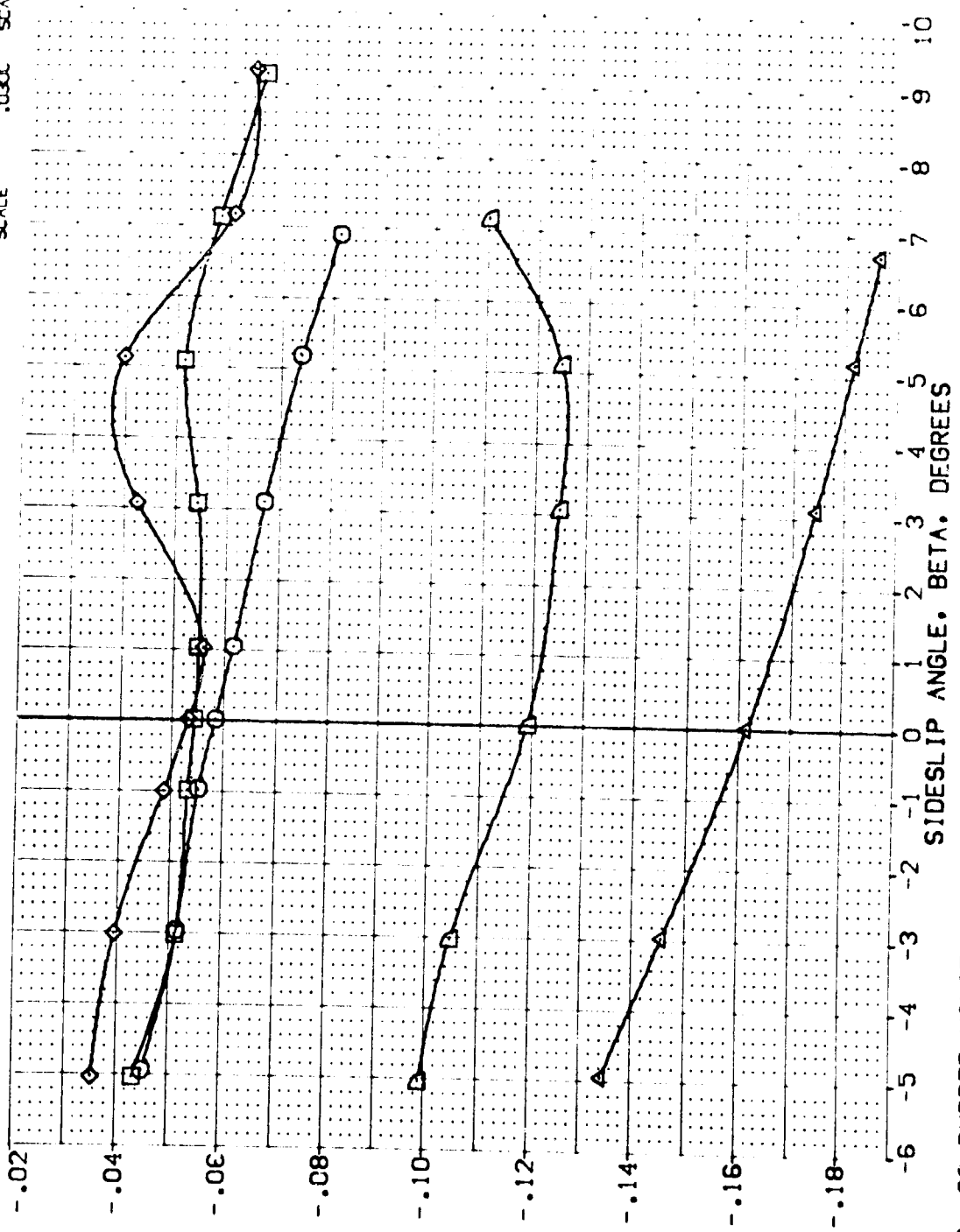


FIG. 32 RUDDER HINGE MOMENTS, 0.0 DEGREES RUDDER

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SFDRPK	REFERENCE INFORMATION
{VE-029}	ARC 11-747 DAS3A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SO.FT.
{VE-030}	ARC 11-747 DAS3A B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
{VE-031}	ARC 11-747 DAS3A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
{VE-032}	ARC 11-747 DAS3A B C M F V	10.000	-10.000	-11.700	55.000	XMRP 32.3010
{VE-033}	ARC 11-747 DAS3A B C M F V	10.000	-10.000	-11.700	55.000	YMRP .0000
{VE-034}	ARC 11-747 DAS3A B C M F V	20.000	-10.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

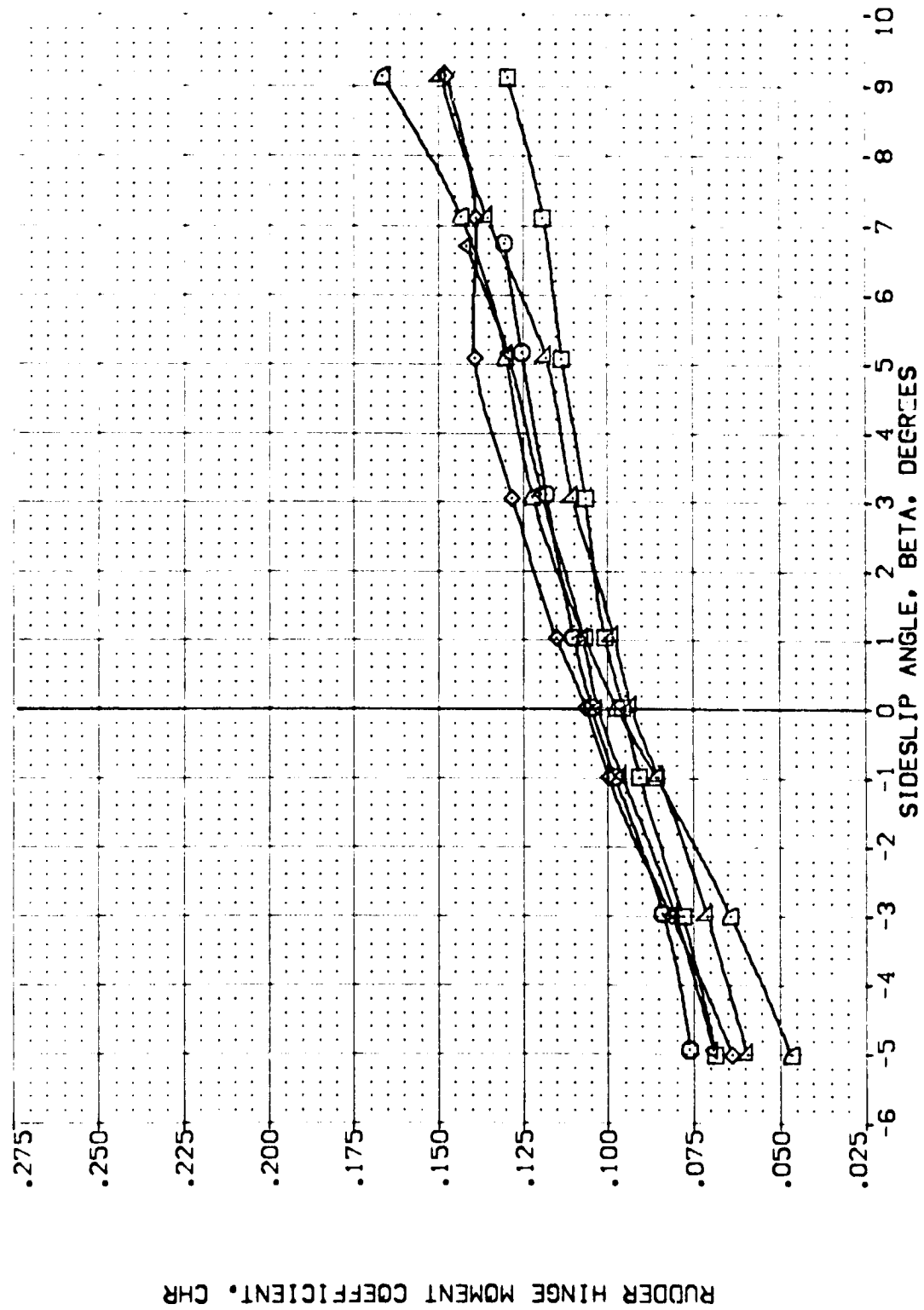


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRK	REFERENCE INFORMATION
(VEJ028)	ARC 11-747 OAS3A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ030)	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(VEJ031)	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(VEJ035)	ARC 11-747 OAS3A B C M F VI V	10.000	-10.000	-11.700	55.000	XMRP 32.3010 IN.
(VEJ036)	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	55.000	YMRP 11.2500 IN.
(VEJ037)	ARC 11-747 OAS3A B C M F VI V	20.000	-10.000	-11.700	55.000	ZMRP 11.2500 IN.
					SCALE	SCALE

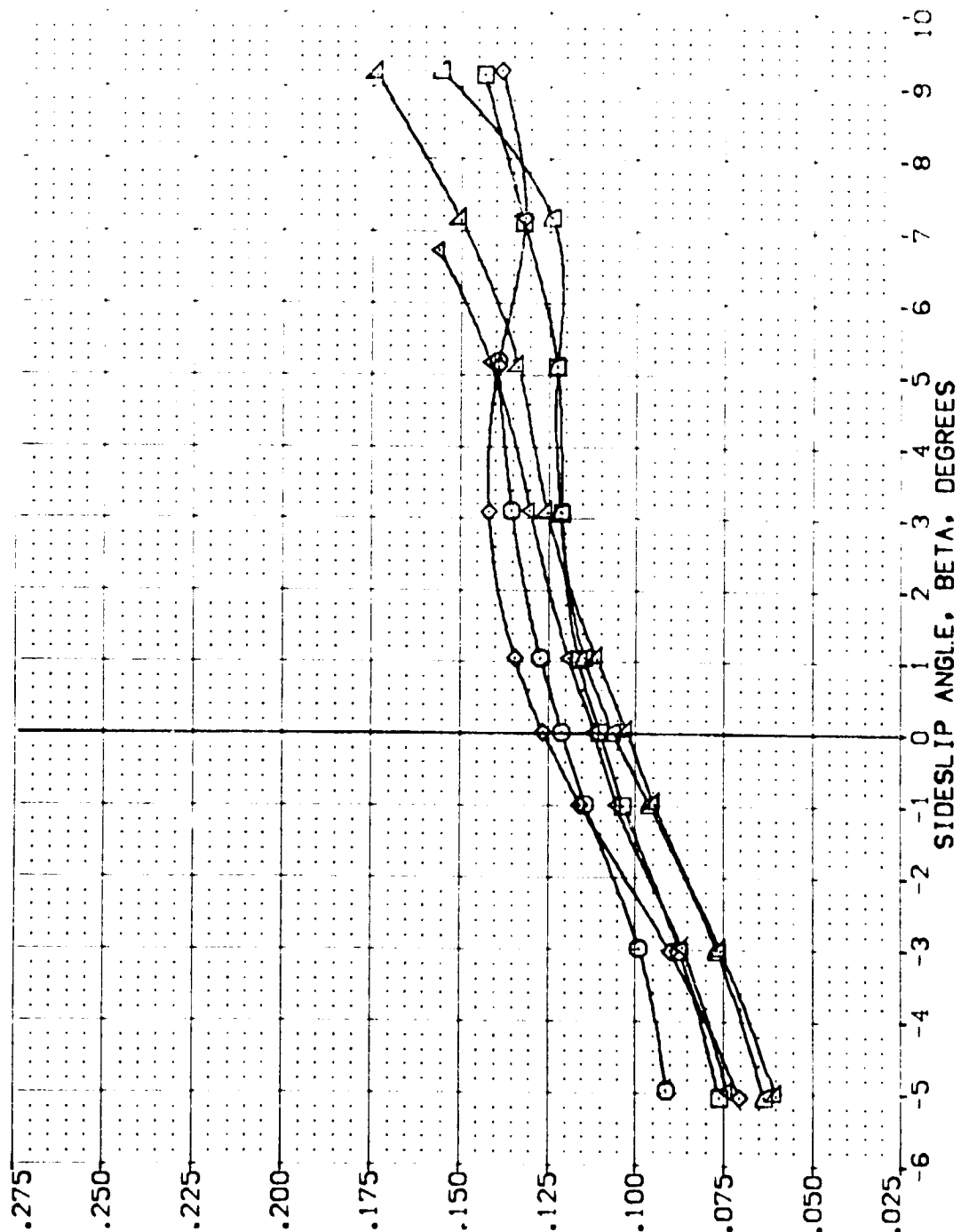


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER  
(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOT.	RV/L	ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
[YE4029]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE4030]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440 N.
[YE4031]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	20.000	-10.000	-11.700	25.000	BREF 28.1004 N.
[YE4035]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	.000	-10.000	-11.700	55.000	XMRP 32.3010 N.
[YE4036]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	10.000	-10.000	-11.700	55.000	YMRP .0300 N.
[YE4037]	ARC    -747 GA53A B C M F V   V	NOT.	RV/L	20.000	-10.000	-11.700	55.000	ZMRP 11.2500 N.
								SCALE .0300

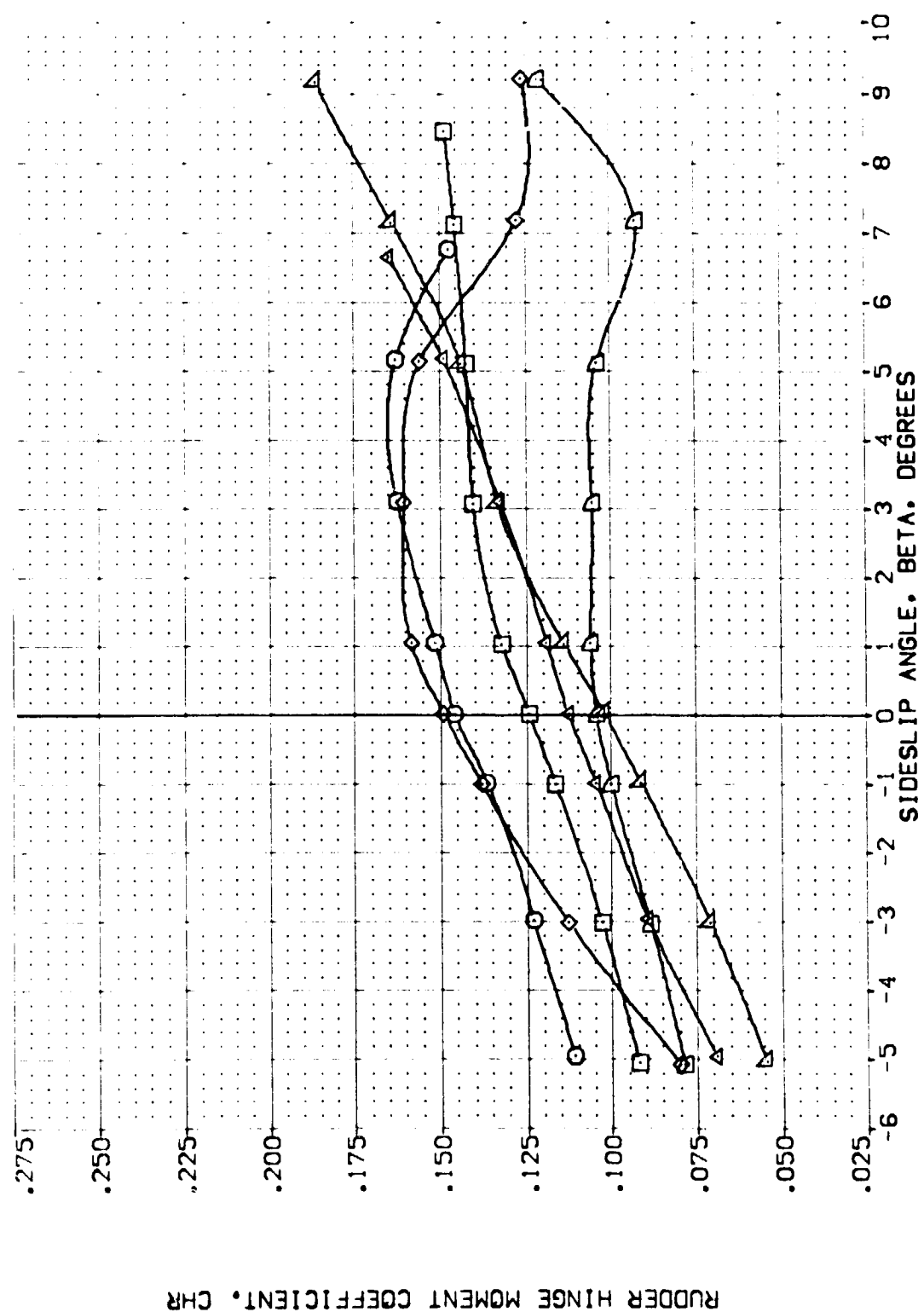


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RV/L	ALPHA	RUDDER	BOFLAP	SPDRK	REFERENCE INFORMATION
[YEJ029]	ARC 11-747 CAS3A B C H F VI	V	.000	-10.000	-11.700	25.000	SREF 2.4210 SC.F.T.
[YEJ030]	ARC 11-747 CAS3A B C H F VI	V	10.000	-10.000	-11.700	25.000	LREF 14.2440
[YEJ031]	ARC 11-747 CAS3A B C H F VI	V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[YEJ035]	ARC 11-747 CAS3A B C H F VI	V	10.000	-10.000	-11.700	55.000	XMRP 32.3010
[YEJ036]	ARC 11-747 CAS3A B C H F VI	V	10.000	-10.000	-11.700	55.000	YMRP 11.2500
[YEJ037]	ARC 11-747 CAS3A B C H F VI	V	20.000	-10.000	-11.700	55.000	ZMRP .0300 SCALE

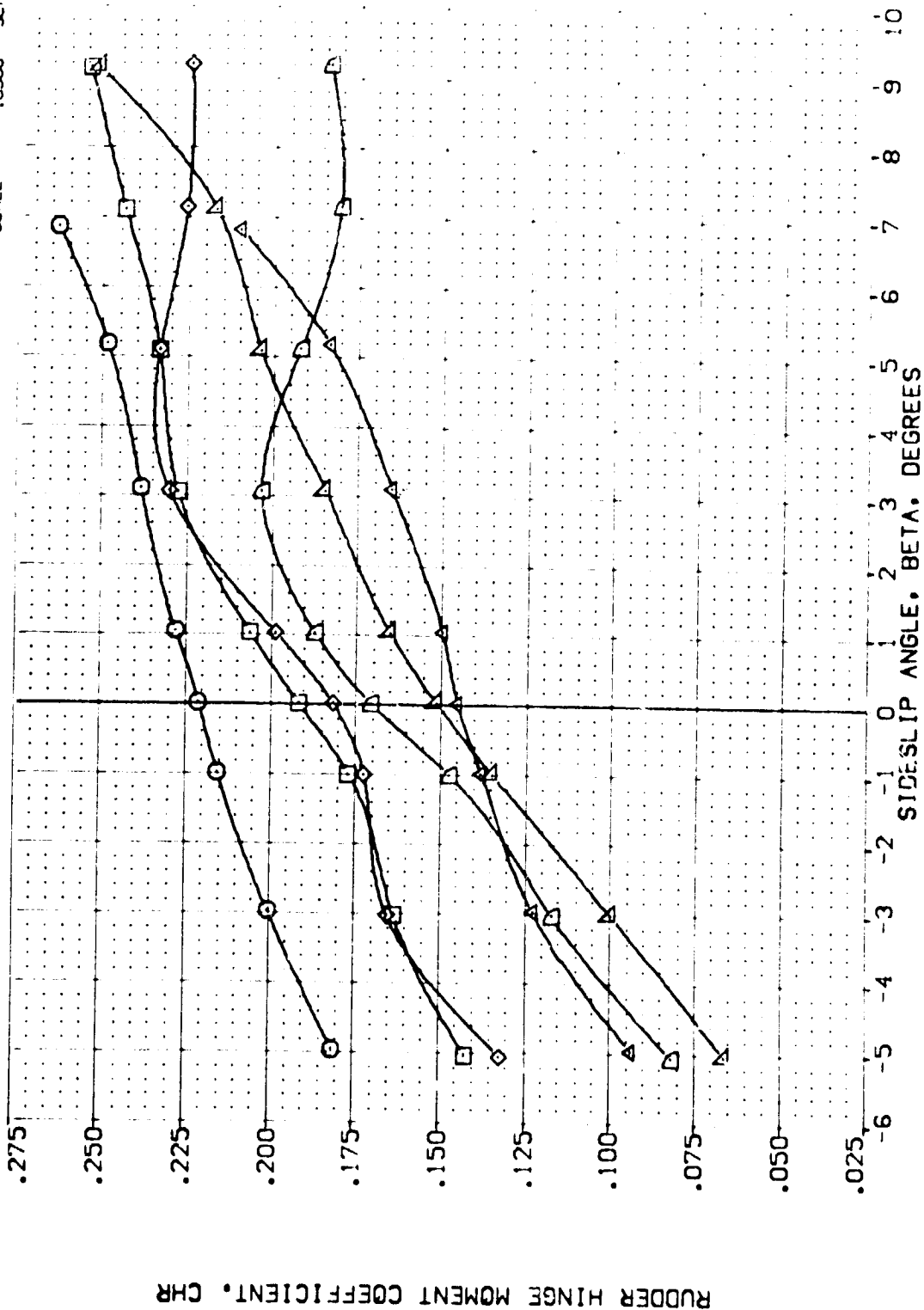


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(0)MACH = 1.05

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDBRK	REFERENCE INFORMATION
(VEJ029)	□	ARC 11-747 DASSA B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210
(VEJ030)	□	ARC 11-747 DASSA B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440
(VEJ031)	□	ARC 11-747 DASSA B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004
(VEJ032)	□	ARC 11-747 DASSA B C H F VI	10.000	-10.000	-11.700	55.000	VMPO 32.3010
(VEJ033)	□	ARC 11-747 DASSA B C H F VI	10.000	-10.000	-11.700	55.000	VMPO 32.3010
(VEJ037)	□	ARC 11-747 DASSA B C H F VI	20.000	-10.000	-11.700	55.000	VMPO 32.3010
							SCALE 11.5300
							SCALE 0.3300

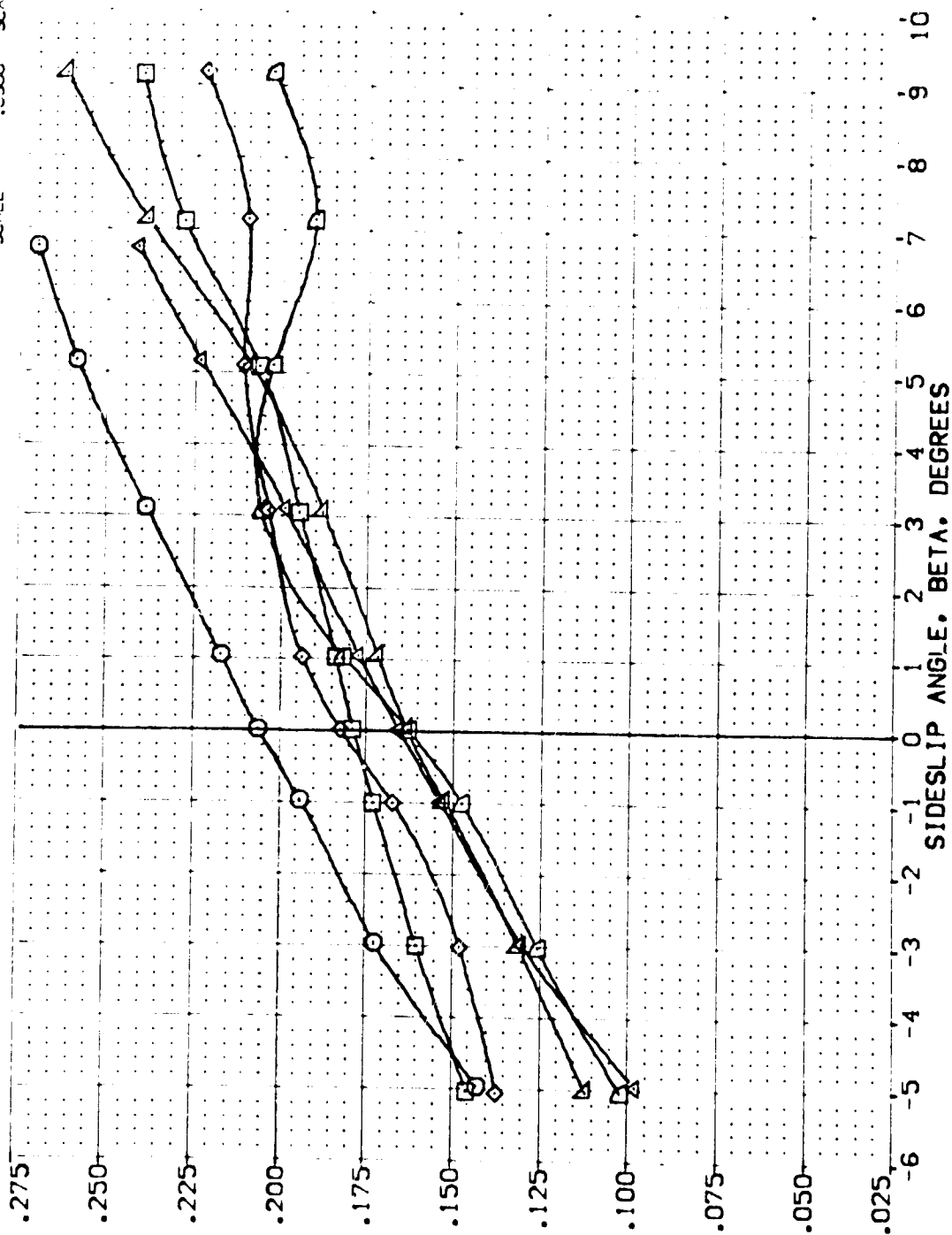


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[YEJ029]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	2.4210
[YEJ030]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	14.2440
[YEJ031]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	28.1004
[YEJ032]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	32.3010
[YEJ036]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	11.2500
[YEJ037]	ARC 11-747	DA53A	B	C	M	F	V	1	0.000	10.000	25.000	11.0300

REFERENCE INFORMATION

SREF	2.4210	SQ.F.T.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.3010	IN.
YMRP	11.2500	IN.
ZMRP	11.0300	IN.
SCALE	11.0300	SCALE

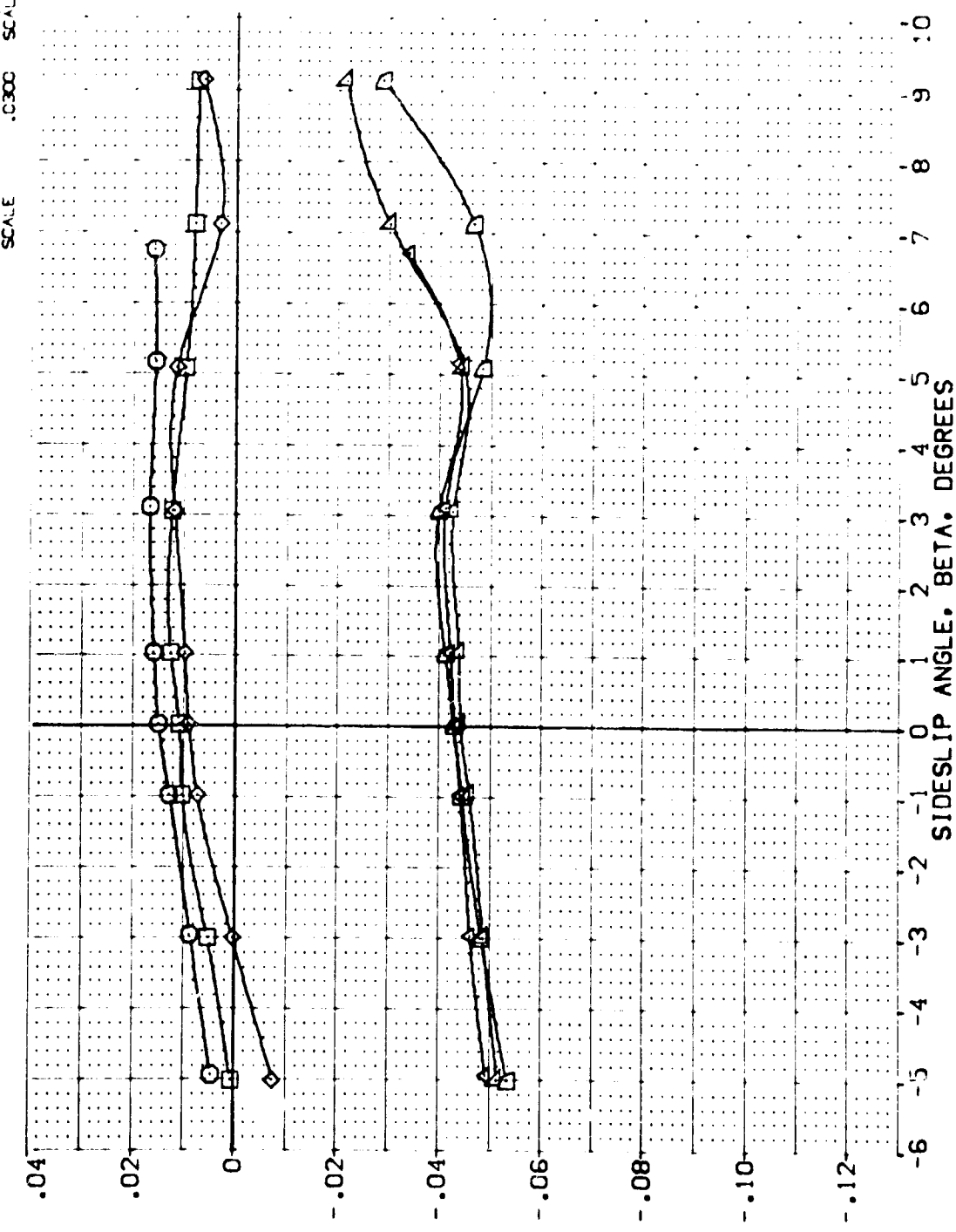


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ079]	ARC 11-747 DA53A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440
[VEJ031]	ARC 11-747 DA53A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	55.000	XMPP 32.3010
[VEJ033]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	55.000	YMPP 11.2500
[VEJ037]	ARC 11-747 DA53A B C M F V	20.000	-10.000	-11.700	55.000	ZMPP 11.2500
					SCALE	SCALE

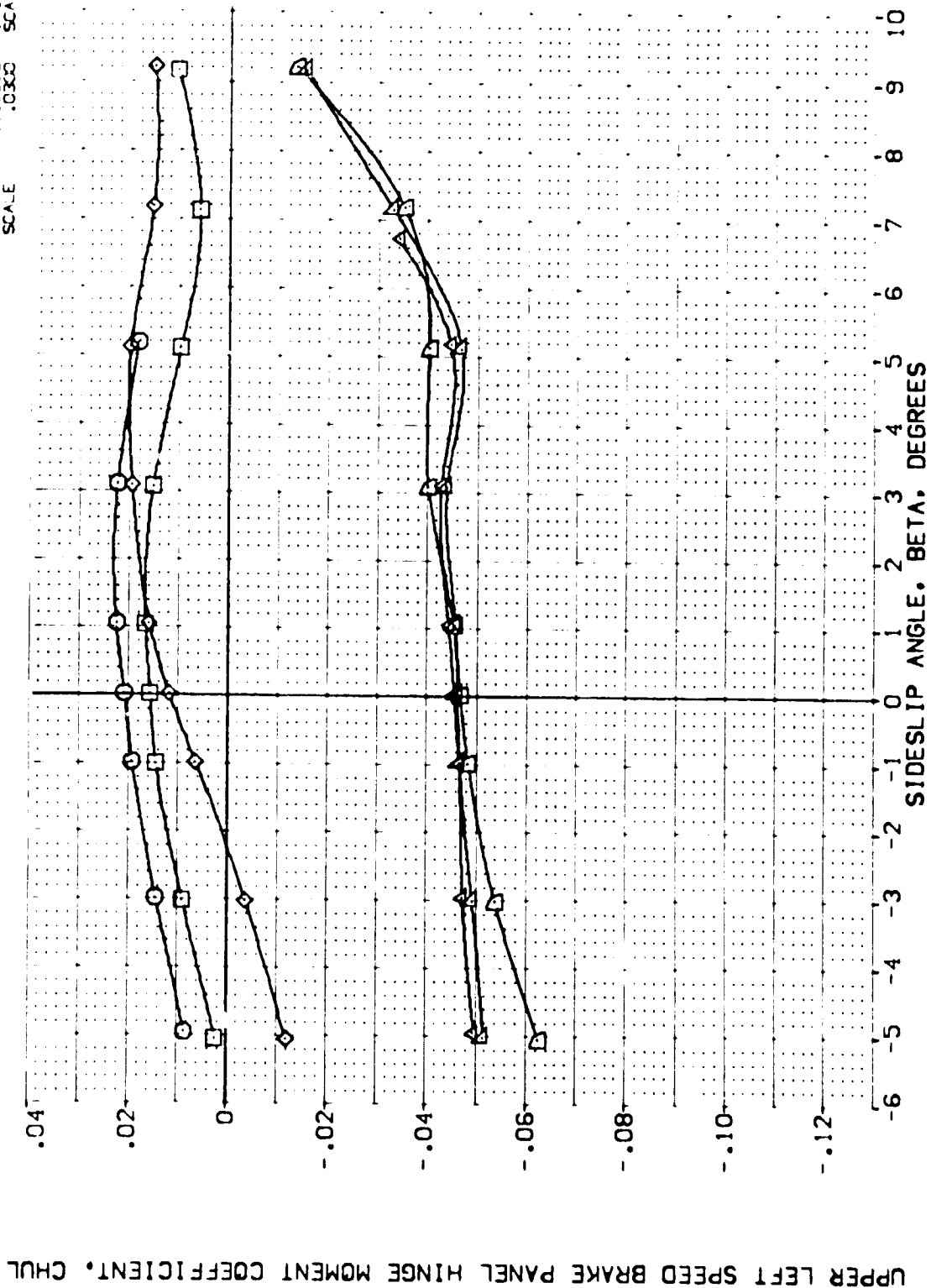


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD LAP	SPD BRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DAS3A B C M F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
[VEJ030]	ARC 11-747 DAS3A B C M F VI	10.000	-10.000	-11.700	25.000	UREF 14.2440 IN.
[VEJ031]	ARC 11-747 DAS3A B C M F VI	20.000	-10.000	-11.700	25.000	BREF 28.0000 IN.
[VEJ035]	ARC 11-747 DAS3A B C M F VI	10.000	-10.000	-11.700	55.000	XREF 32.0000 IN.
[VEJ036]	ARC 11-747 DAS3A B C M F VI	10.000	-10.000	-11.700	55.000	YREF 11.0000 IN.
[VEJ037]	ARC 11-747 DAS3A B C M F VI	20.000	-10.000	-11.700	55.000	ZREF 11.0000 IN.

SCALE .0300

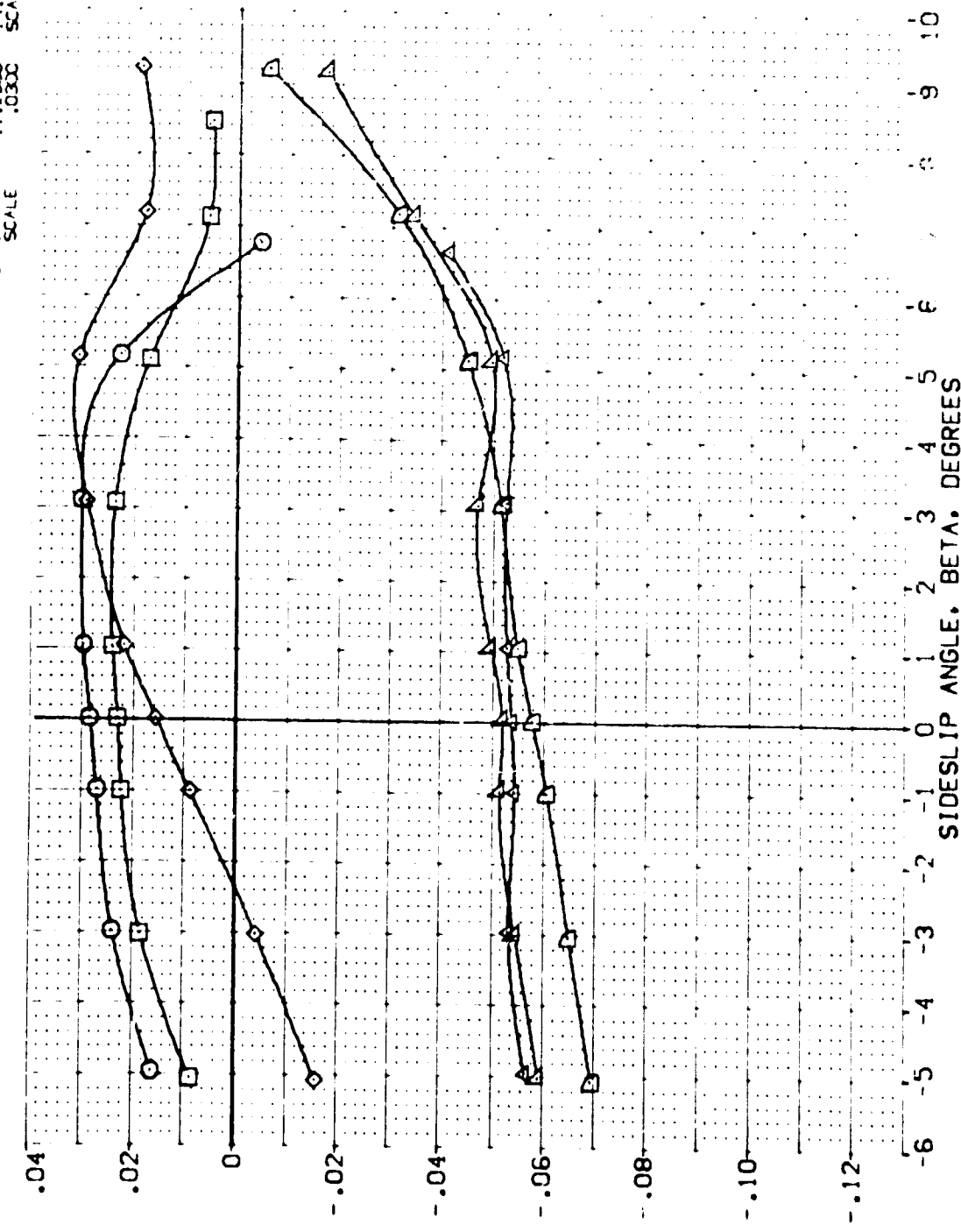


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	RUDDER	BD/LAP	SPEED	REFERENCE INFORMATION
[YE1029]	ARC 11-747 BA53A B C H F V	V	RV/L	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE1030]	ARC 11-747 BA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440
[YE1031]	ARC 11-747 BA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	25.000	BREF 28.1024
[YE1032]	ARC 11-747 BA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	55.000	YREF 32.3010
[YE1033]	ARC 11-747 BA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	55.000	ZREF 11.2500
[YE1034]	ARC 11-747 BA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	55.000	SCALE .0300

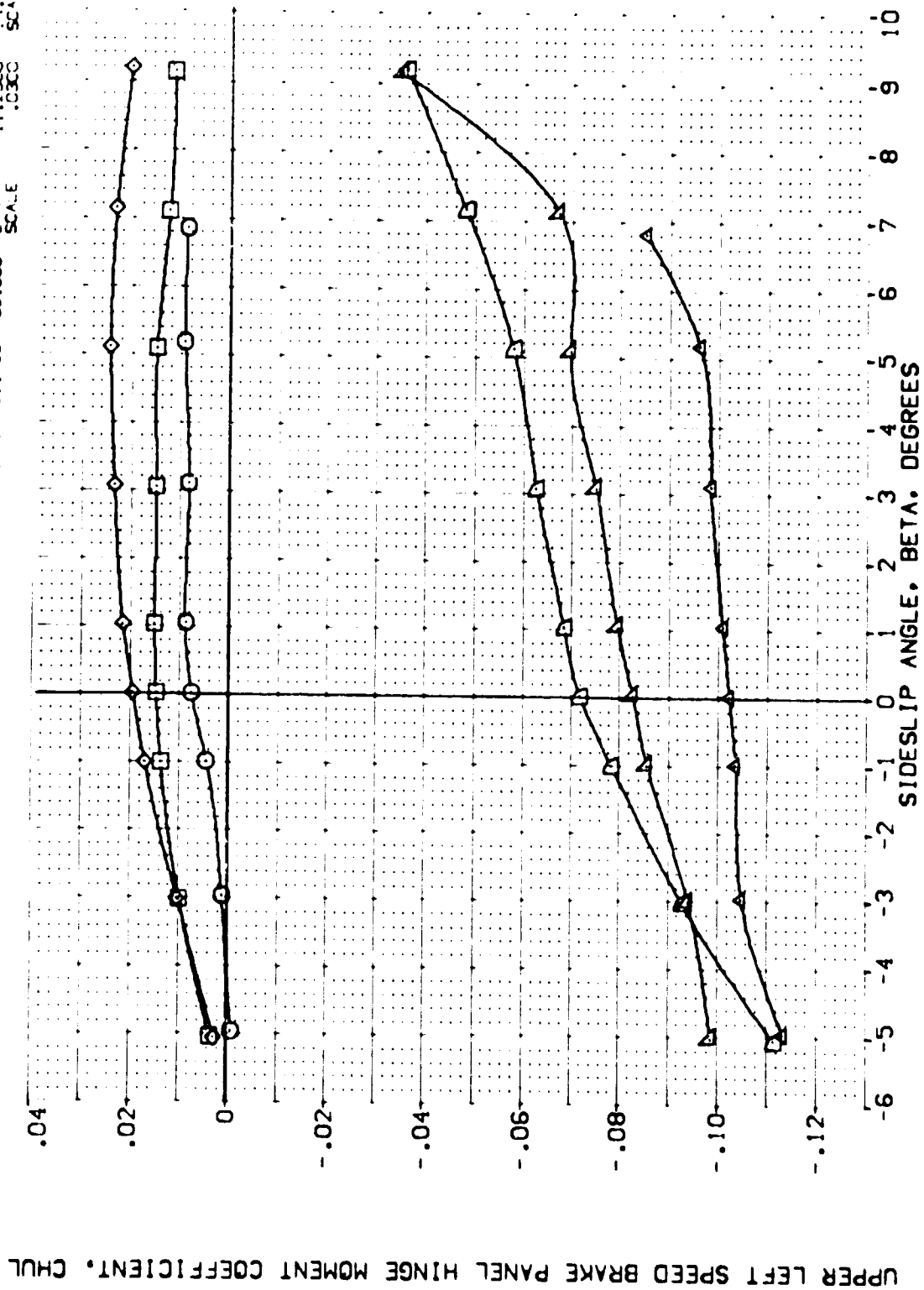


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(D) MAC = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDK	REFERENCE INFORMATION
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2 4210 SQ.FT.
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	10.000	-10.000	-11.700	25.000	LREF 14 2440
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	20.000	-10.000	-11.700	25.000	SREF 20 1004
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	10.000	-10.000	-11.700	55.000	XMRP 30 0000
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	20.000	-10.000	-11.700	55.000	YMRP 11 2500
ARC 11-747 OAS3A B C H F V	ARC 11-747 OAS3A B C H F V	20.000	-10.000	-11.700	55.000	ZMRP 0300
						SCALE

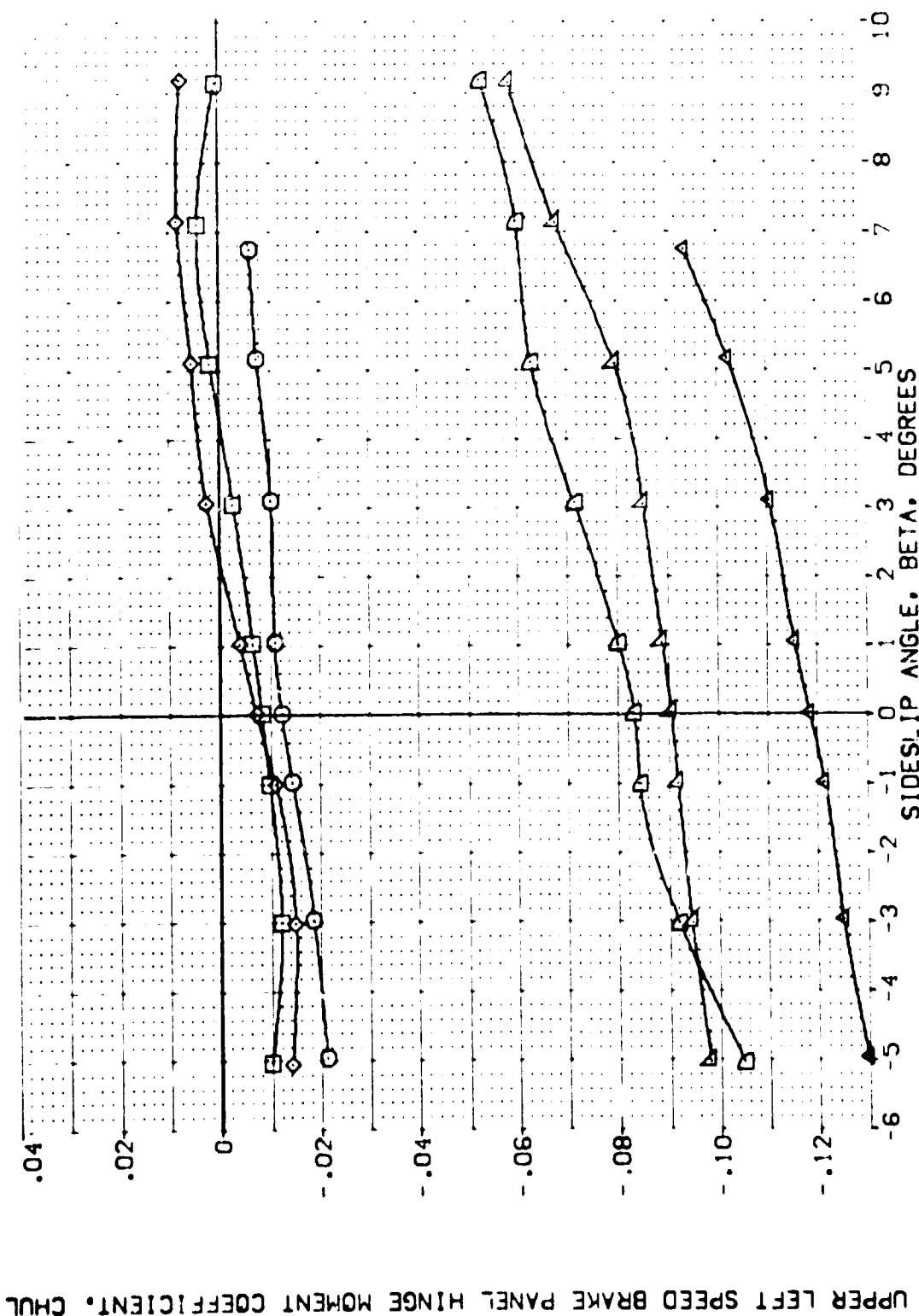


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER  
(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDRBK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DA53A B C M F V	.000	-10.000	-11.700	25.000	SREF 2.4210 50.000
[VEJ030]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	25.000	LRREF 14.2440 10.000
[VEJ031]	ARC 11-747 DA53A B C M F V	20.000	-10.000	-11.700	25.000	BRREF 28.1004 10.000
[VEJ035]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	55.000	XMRP 32.3010 10.000
[VEJ036]	ARC 11-747 DA53A B C M F V	10.000	-10.000	-11.700	55.000	YMRP 11.2500 10.000
[VEJ037]	ARC 11-747 DA53A B C M F V	20.000	-10.000	-11.700	55.000	ZMRP 11.2500 10.000
						SCALE .0300

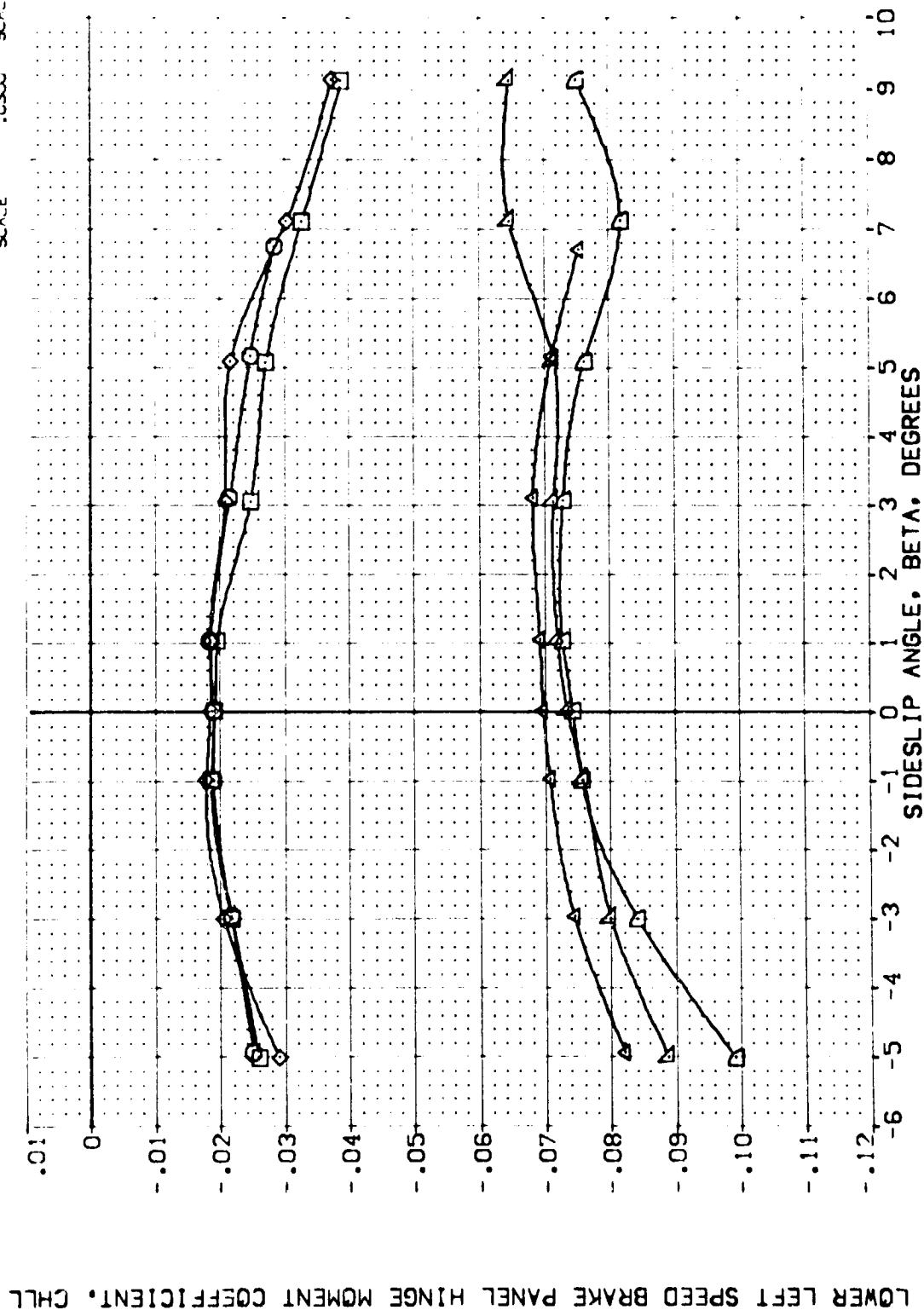


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	BO/LAP	SPDRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747	CA53A B C H F VI	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747	CA53A B C H F VI	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ031]	ARC 11-747	CA53A B C H F VI	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ035]	ARC 11-747	CA53A B C H F VI	10.000	-10.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ036]	ARC 11-747	CA53A B C H F VI	20.000	-10.000	-11.700	55.000	ZMRP 11.2500 IN.
[VEJ037]	ARC 11-747	CA53A B C H F VI	20.000	-10.000	-11.700	55.000	SCALE .0300

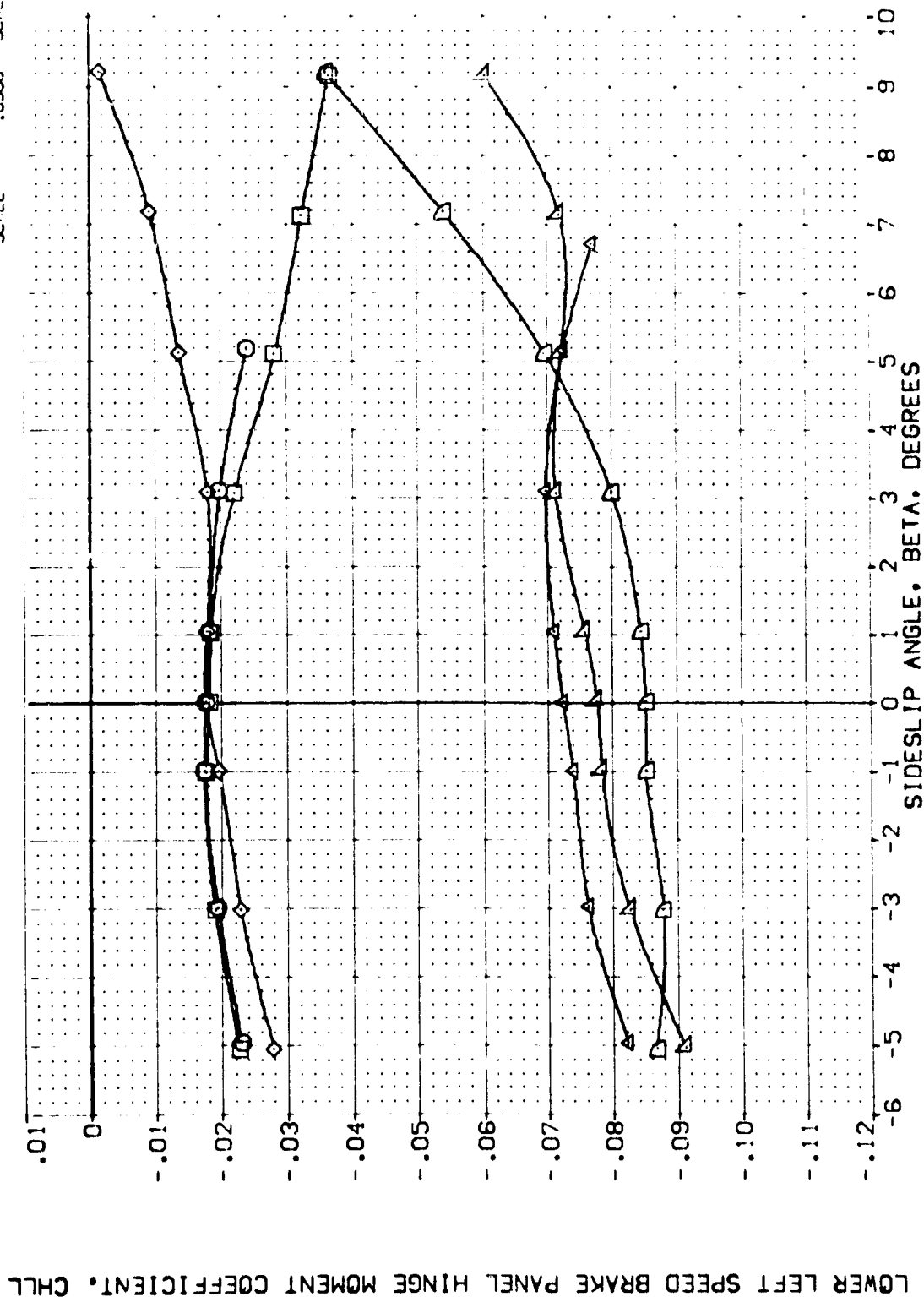


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YEJ029]	ARC 11-747 DA53A B C M F V1 V	.000	-10.000	-.700	25.000	SREF 2.4210 SQ.FT.
[YEJ030]	ARC 11-747 DA53A B C M F V1 V	10.000	-10.000	-.700	25.000	LRFF 15.2440
[YEJ031]	ARC 11-747 DA53A B C M F V1 V	20.000	-10.000	-.700	25.000	BREF 28.1004
[YEJ032]	ARC 11-747 DA53A B C M F V1 V	10.000	-10.000	-.700	55.000	YMRD 32.3010
[YEJ033]	ARC 11-747 DA53A B C M F V1 V	20.000	-10.000	-.700	55.000	ZMRD 11.2500
[YEJ034]	ARC 11-747 DA53A B C M F V1 V	20.000	-10.000	-.700	55.000	SCALE .0300

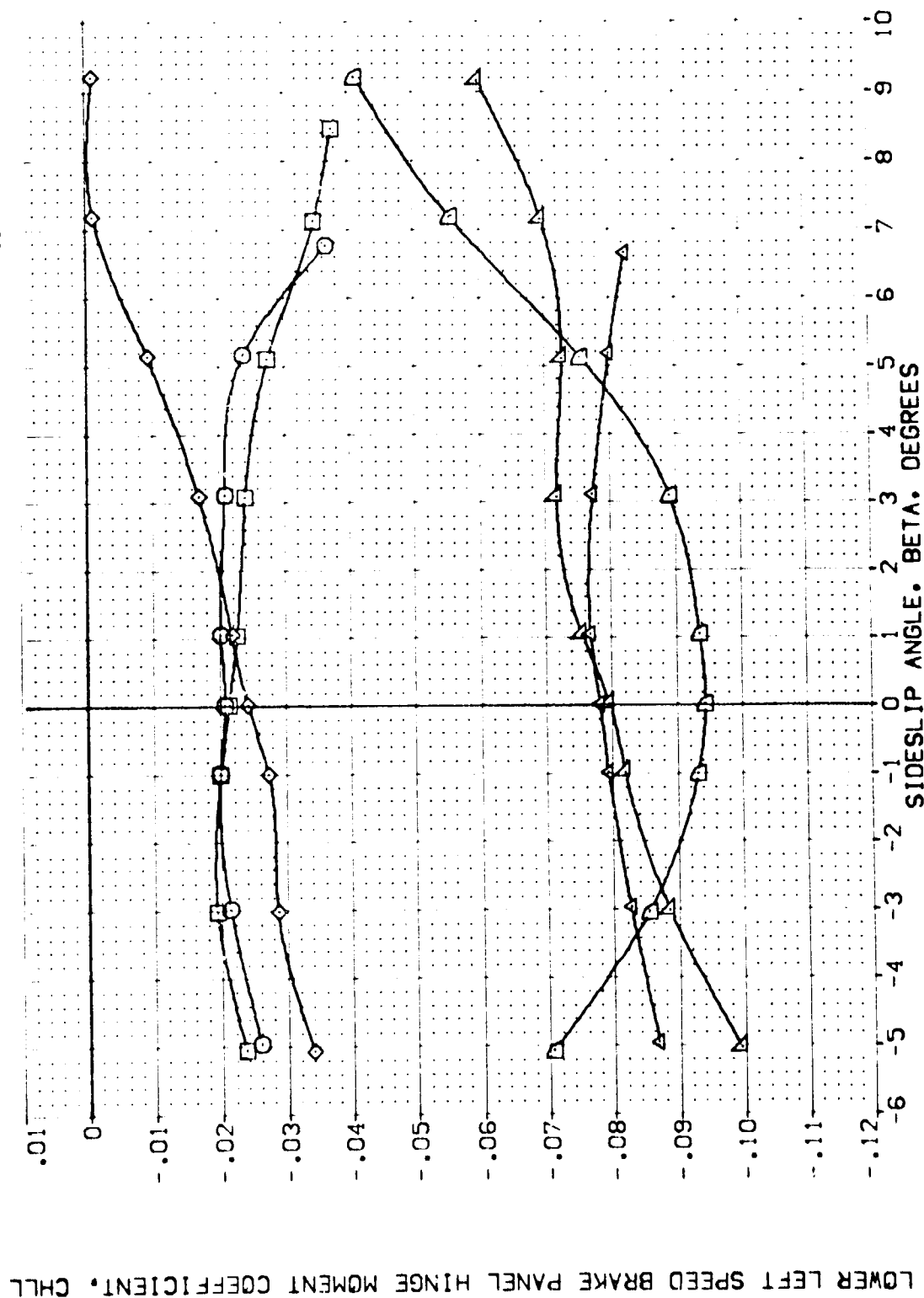


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MAC = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210
[VEJ030]	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	25.000	REF 14.2440
[VEJ031]	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	25.000	BRF 28.1000
[VEJ035]	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	55.000	YREF 32.3010
[VEJ036]	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	55.000	YREF 11.2500
[VEJ037]	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	55.000	SCALE .0300

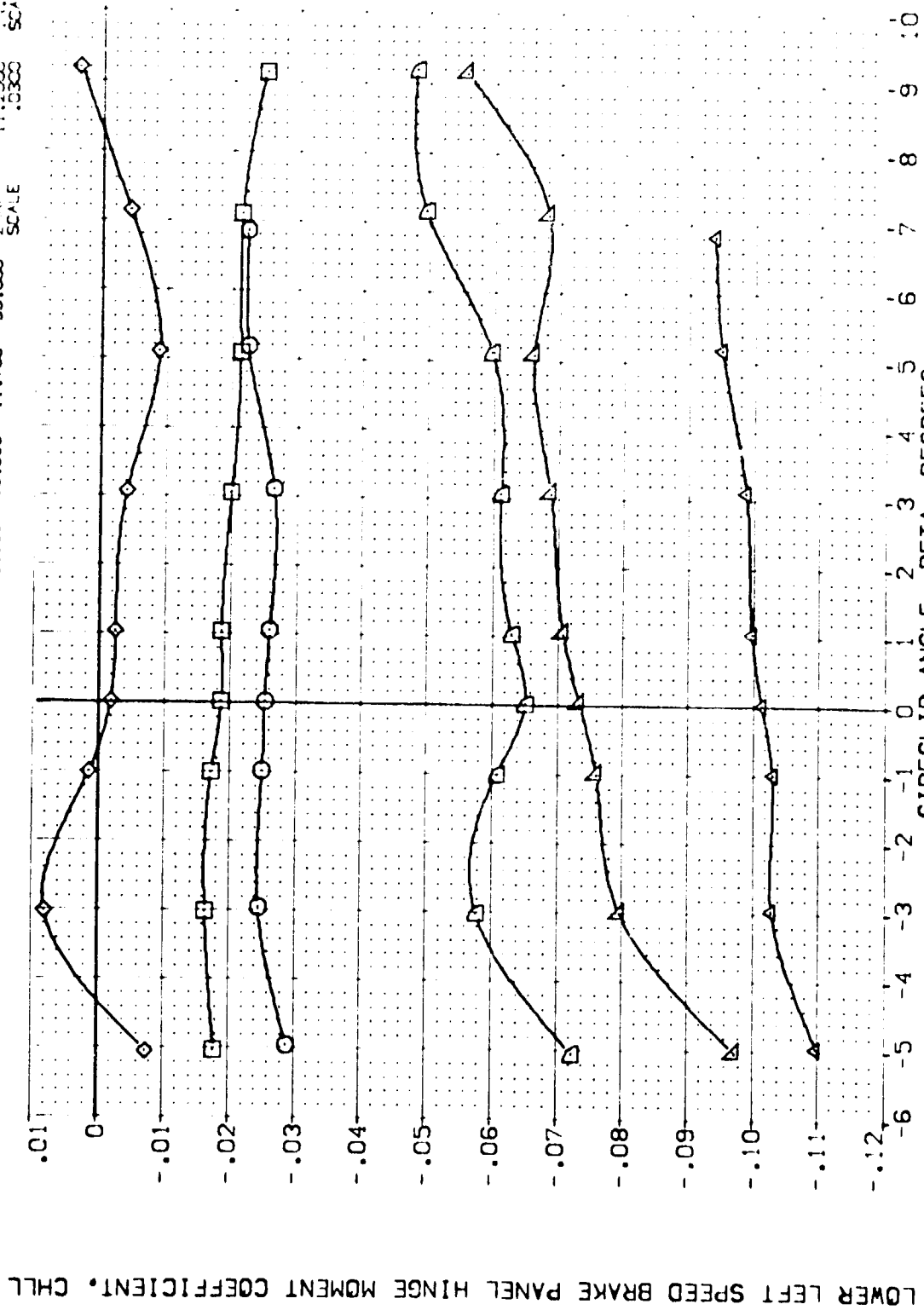


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MAC = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 DA53A B C M F V1	0.000	-10.000	-11.700	25.000	SREF 2.421C SQ.FT.
[VEJ030]	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	25.000	LREF 14.244C
[VEJ031]	ARC 11-747 DA53A B C M F V1	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ032]	ARC 11-747 DA53A B C M F V1	10.000	-10.000	-11.700	55.000	YMRP 32.301C
[VEJ033]	ARC 11-747 DA53A B C M F V1	20.000	-10.000	-11.700	55.000	YMRP 11.250C
[VEJ034]	ARC 11-747 DA53A B C M F V1	20.000	-10.000	-11.700	55.000	SCALE .030C

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

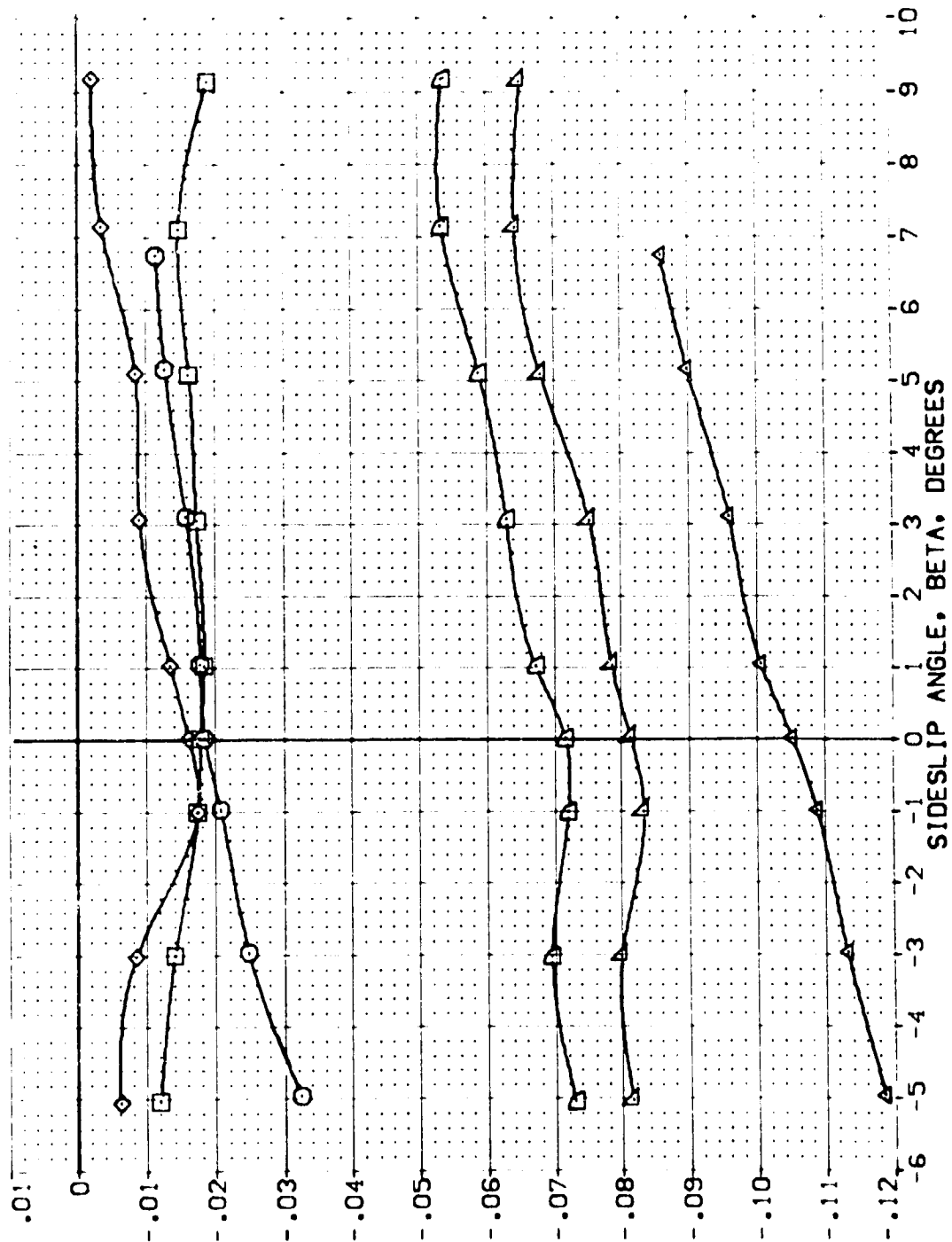


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 D453A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210
[VEJ030]	ARC 11-747 D453A B C M F V	10.000	-10.000	-11.700	25.000	UREF 14.2440
[VEJ031]	ARC 11-747 D453A B C M F V	20.000	-10.000	-11.700	25.000	BRFP 28.1004
[VEJ032]	ARC 11-747 D453A B C M F V	30.000	-10.000	-11.700	25.000	YMRP 32.3010
[VEJ033]	ARC 11-747 D453A B C M F V	40.000	-10.000	-11.700	25.000	ZMRP 11.2500
[VEJ037]	ARC 11-747 D453A B C M F V	50.000	-10.000	-11.700	25.000	SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

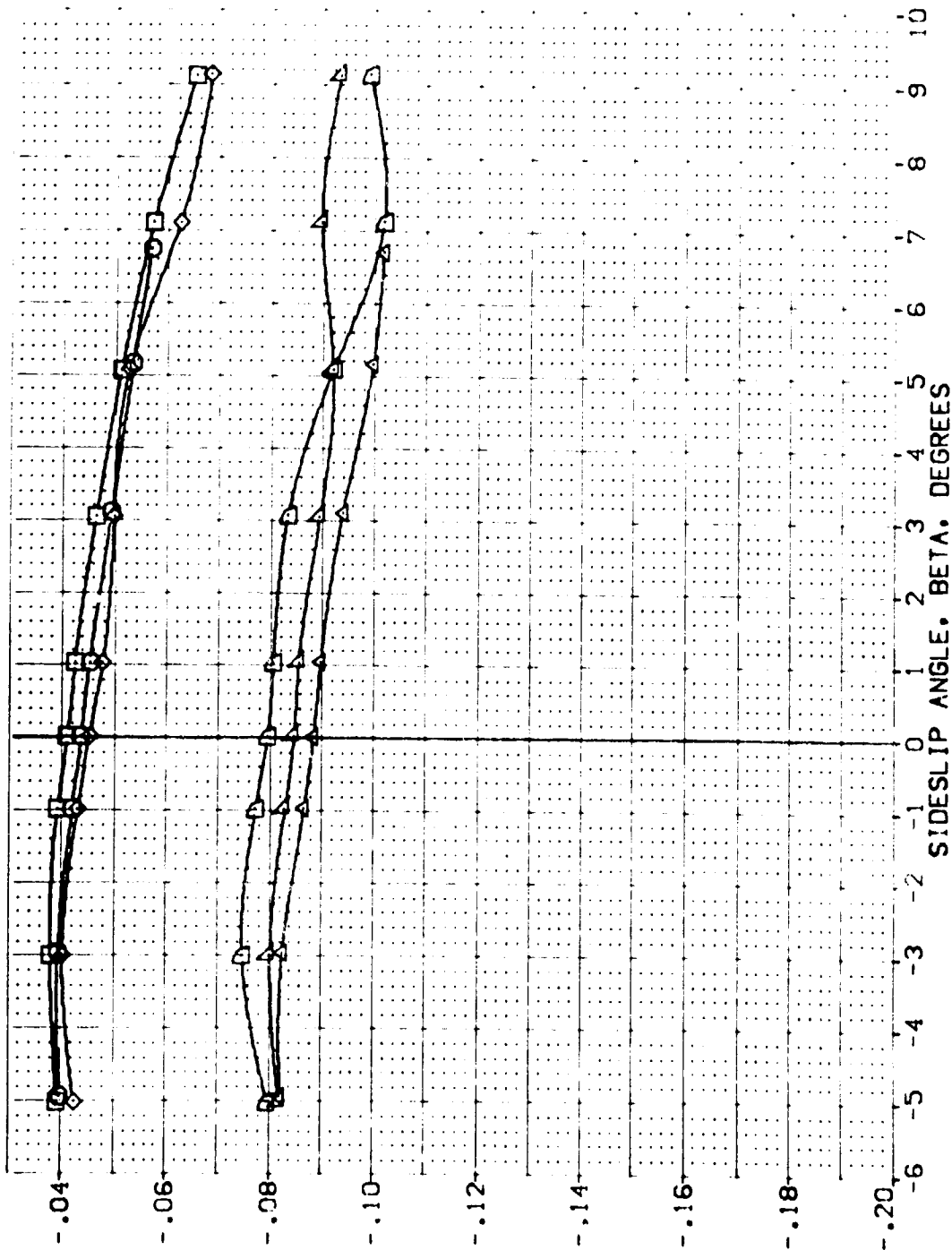


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
(YEJ029)	ARC 11-747 DA53A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJ030)	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(YEJ031)	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(YEJ032)	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	55.000	XMRO 32.3010 IN.
(YEJ036)	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	55.000	YMRO 11.2500 IN.
(YEJ037)	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	55.000	ZMRO 11.2500 IN.
						SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

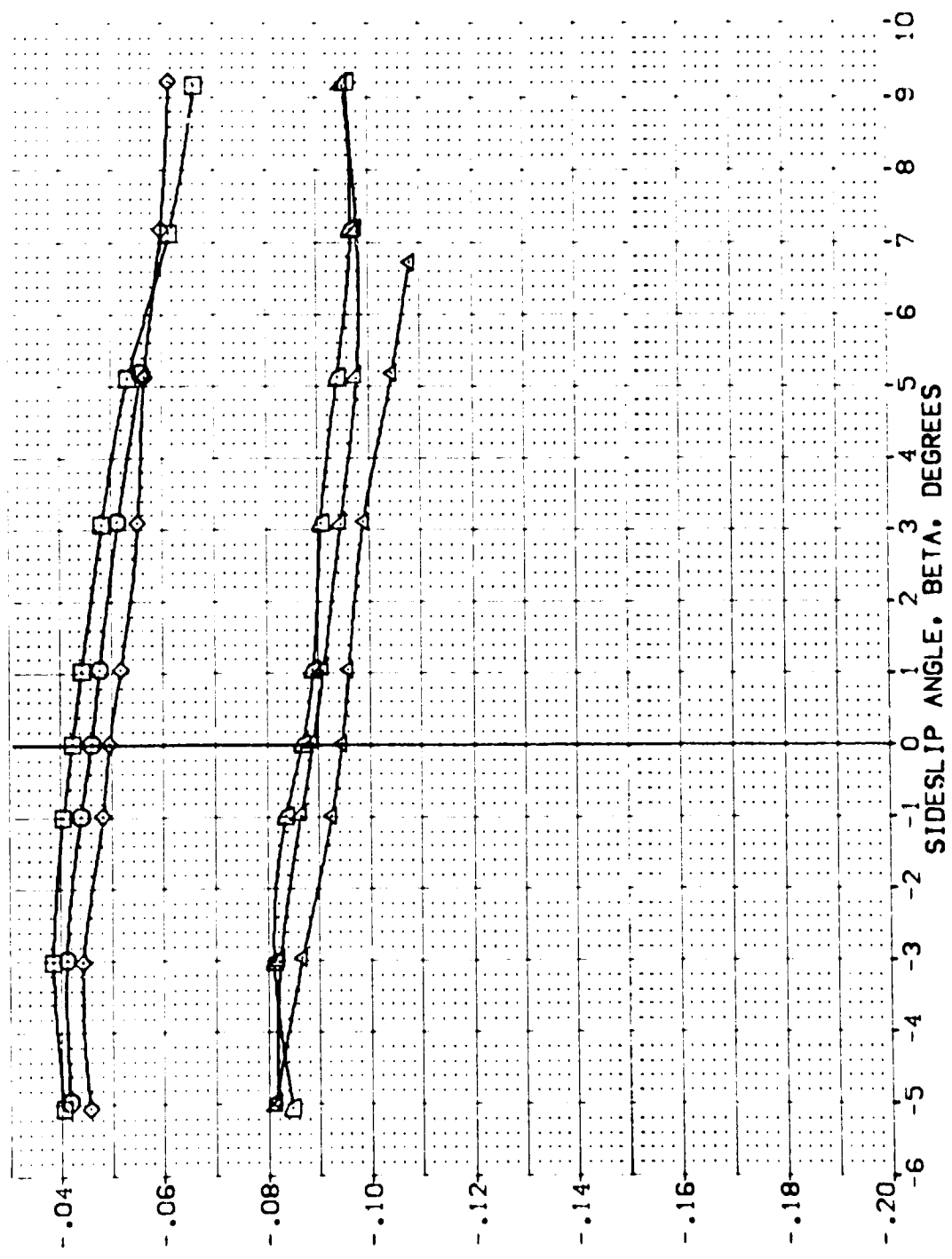


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ028]	ARC 11-747	BA53A B C H F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747	BA53A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ031]	ARC 11-747	BA53A B C H F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ033]	ARC 11-747	BA53A B C H F VI V	0.000	-10.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ036]	ARC 11-747	BA53A B C H F VI V	10.000	-10.000	-11.700	55.000	ZMRP 11.2500 IN.
[VEJ037]	ARC 11-747	BA53A B C H F VI V	20.000	-10.000	-11.700	55.000	SCALE 0.0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

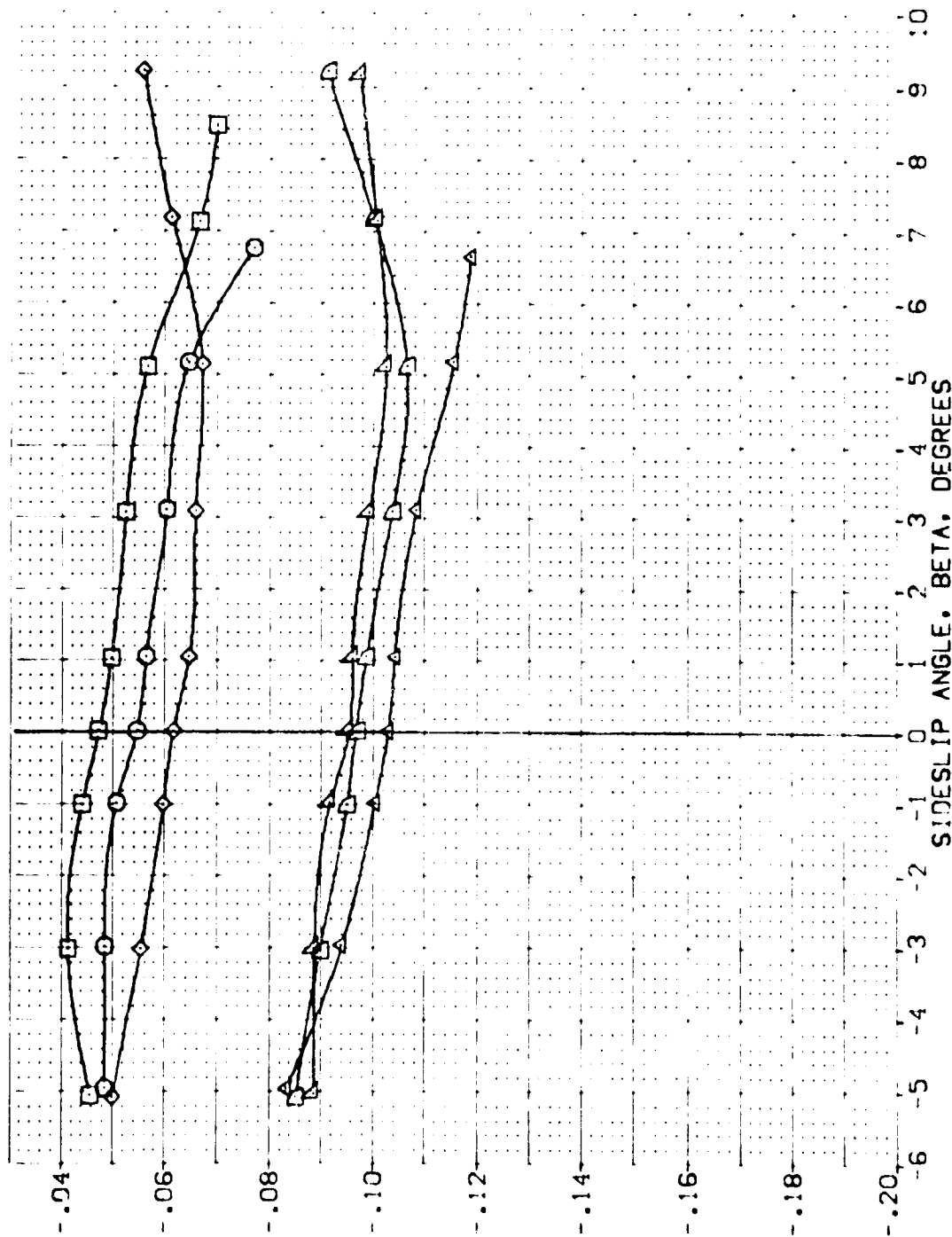


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPDRBK	REFERENCE INFORMATION
[VEJ029]	ABC -747 B453A B C M F VI	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ABC -747 B453A B C M F VI	.000	-10.000	-11.700	25.000	BRF 14.2440
[VEJ031]	ABC -747 B453A B C M F VI	10.000	-10.000	-11.700	25.000	BRF 28.1014
[VEJ032]	ABC -747 B453A B C M F VI	20.000	-10.000	-11.700	25.000	BRF 32.3010
[VEJ033]	ABC -747 B453A B C M F VI	10.000	-10.000	-11.700	55.000	YREF 11.2500
[VEJ034]	ABC -747 B453A B C M F VI	20.000	-10.000	-11.700	55.000	SCALE .0300 SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

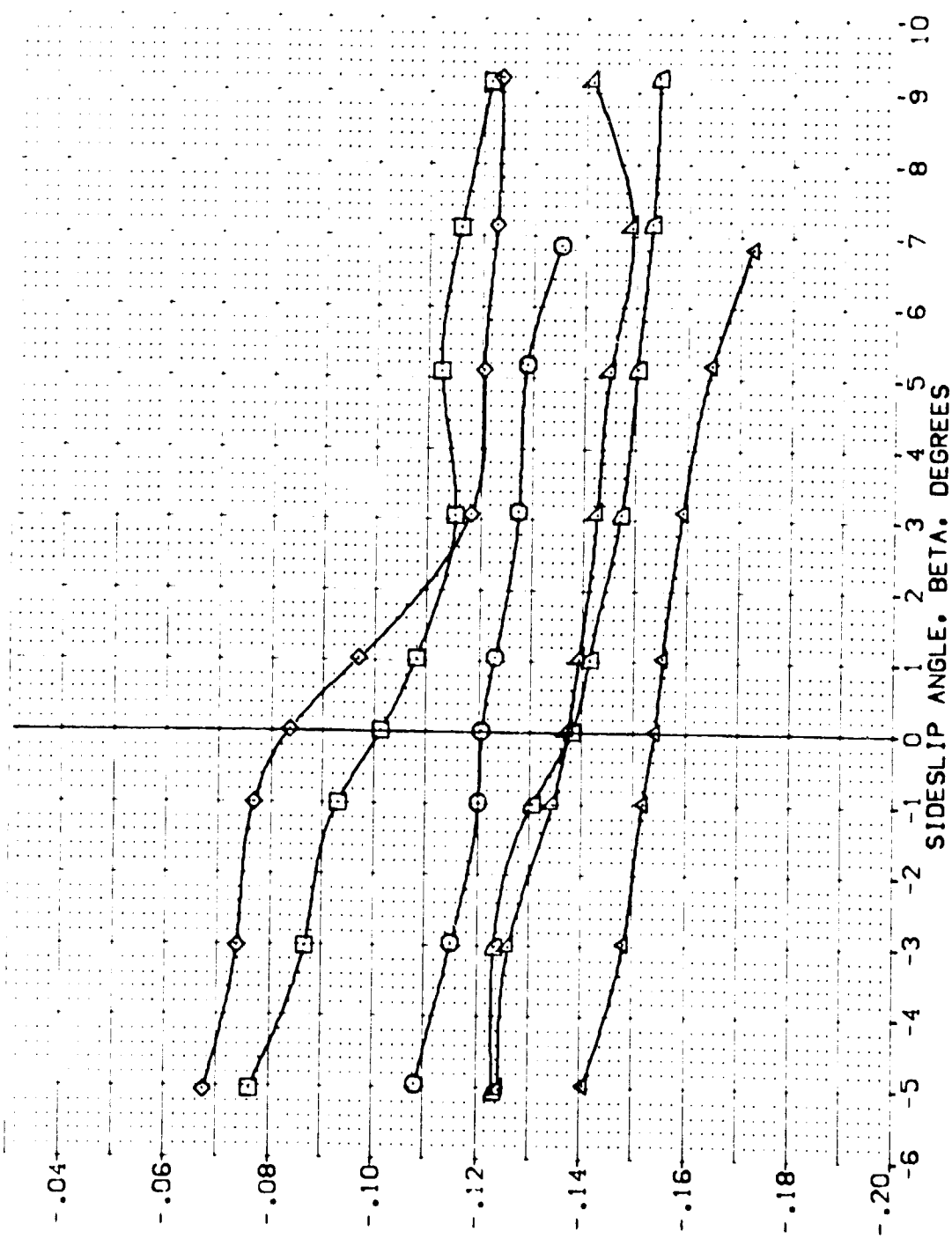


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER.

(D)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NO.	RV/L	ALPHA	RUDDER	BOLAP	SPOBRK	REFERENCE INFORMATION
[YEJ029]	ARC 11-747 DA53A B C H F V	V	RV/L	0.000	-10.000	-11.700	75.000	SREF 2.4210 SQ.FT.
[YEJ030]	ARC 11-747 DA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	75.000	LREF 14.2140 IN.
[YEJ031]	ARC 11-747 DA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	75.000	BREF 28.1004 IN.
[YEJ032]	ARC 11-747 DA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	55.000	XMRP 32.3010 IN.
[YEJ033]	ARC 11-747 DA53A B C H F V	V	RV/L	10.000	-10.000	-11.700	55.000	YMRP .0000 IN.
[YEJ036]	ARC 11-747 DA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	55.000	ZMRP 11.2500 IN.
[YEJ037]	ARC 11-747 DA53A B C H F V	V	RV/L	20.000	-10.000	-11.700	55.000	SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

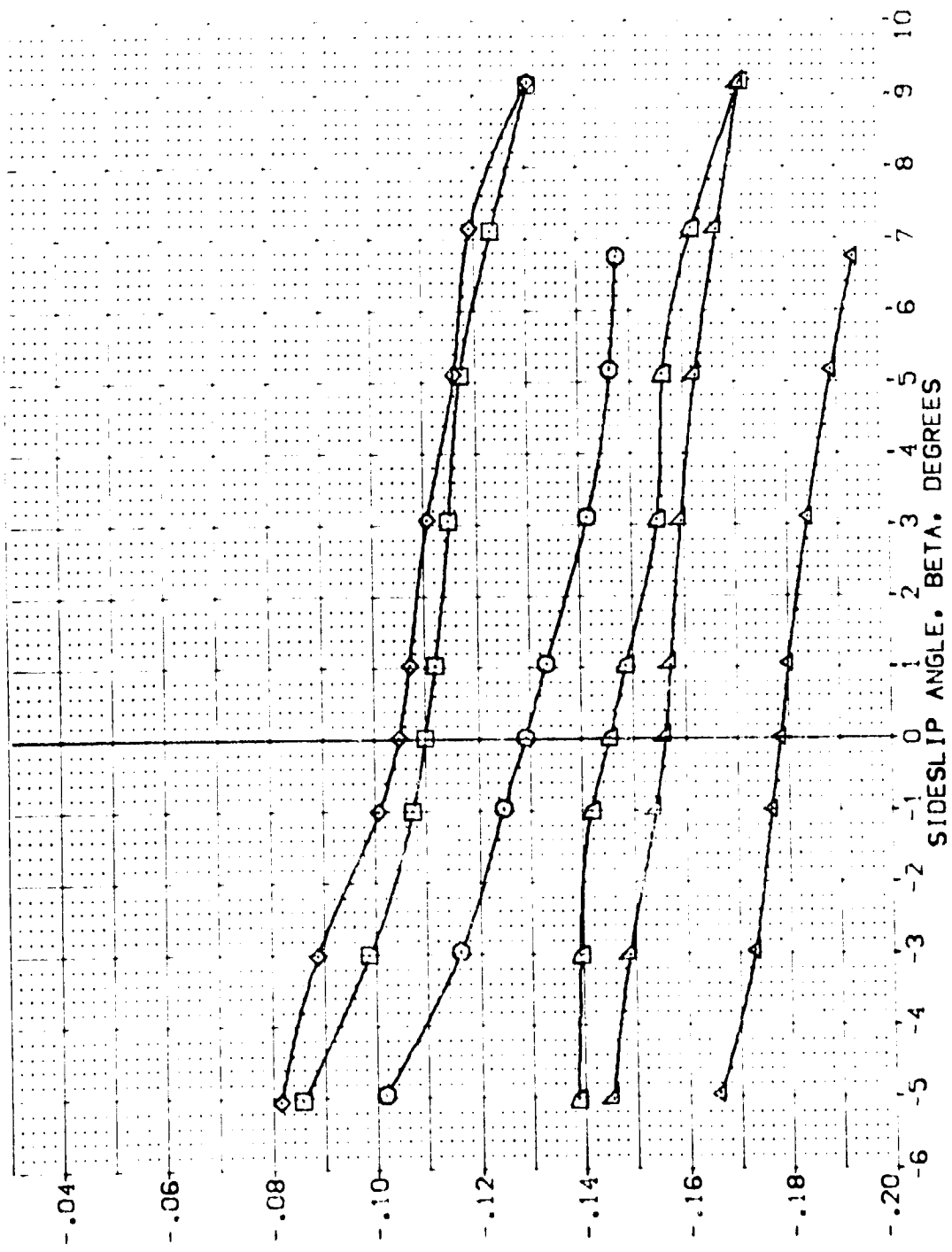


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[VEJ079]	ARC 11-747 QAS3A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ080]	ARC 11-747 QAS3A B C M F V	10.000	-10.000	-11.700	25.000	REF 14.2440
[VEJ081]	ARC 11-747 QAS3A B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
[VEJ082]	ARC 11-747 QAS3A B C M F V	10.000	-10.000	-11.700	55.000	XMRP 32.3010
[VEJ083]	ARC 11-747 QAS3A B C M F V	20.000	-10.000	-11.700	55.000	YMRP .0000
[VEJ084]	ARC 11-747 QAS3A B C M F V	20.000	-10.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

LOWER RIGHT SPEED BRAKE HINGE MOMENT COEFFICIENT, CLRL

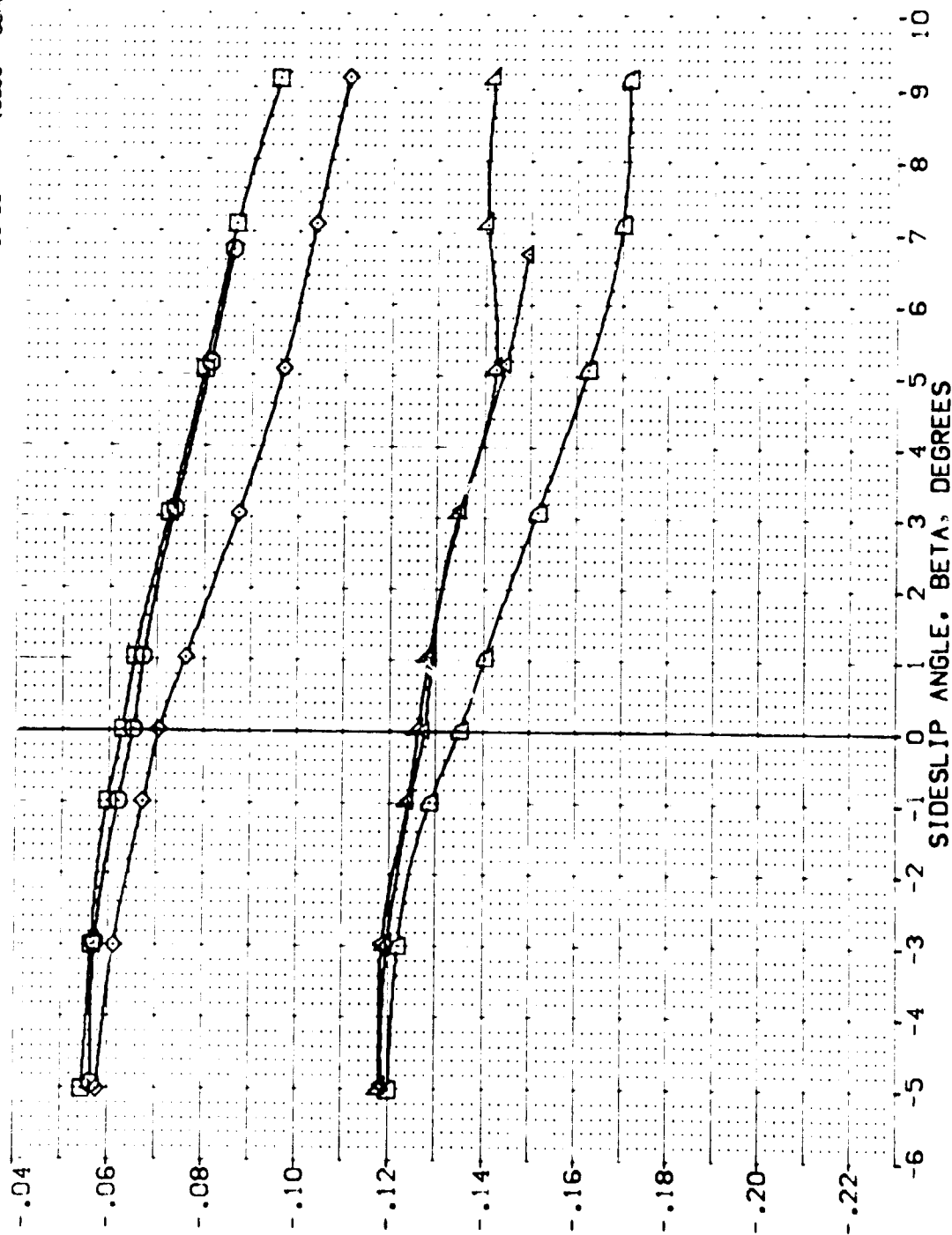


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(A)MAC<sub>R</sub> = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VEJ029)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ030)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ031)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ032)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ033)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ034)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ035)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ036)	ARC 11-747	DA53A	B	C	H	F	V	V
(VEJ037)	ARC 11-747	DA53A	B	C	H	F	V	V

ALPHA RUDDER BOFLAP SPEEDK REFERENCE INFORMATION

0.000	-10.000	-11.700	25.000	SREF	2.4210	50.000
10.000	-10.000	-11.700	25.000	LREF	14.2440	IN.
20.000	-10.000	-11.700	25.000	BREF	28.1004	IN.
30.000	-10.000	-11.700	55.000	XMRP	30.3010	IN.
40.000	-10.000	-11.700	55.000	YMRP	0.0000	IN.
50.000	-10.000	-11.700	55.000	ZMRP	11.2500	IN.
60.000	-10.000	-11.700	55.000	SCALE	0.0000	SCALE

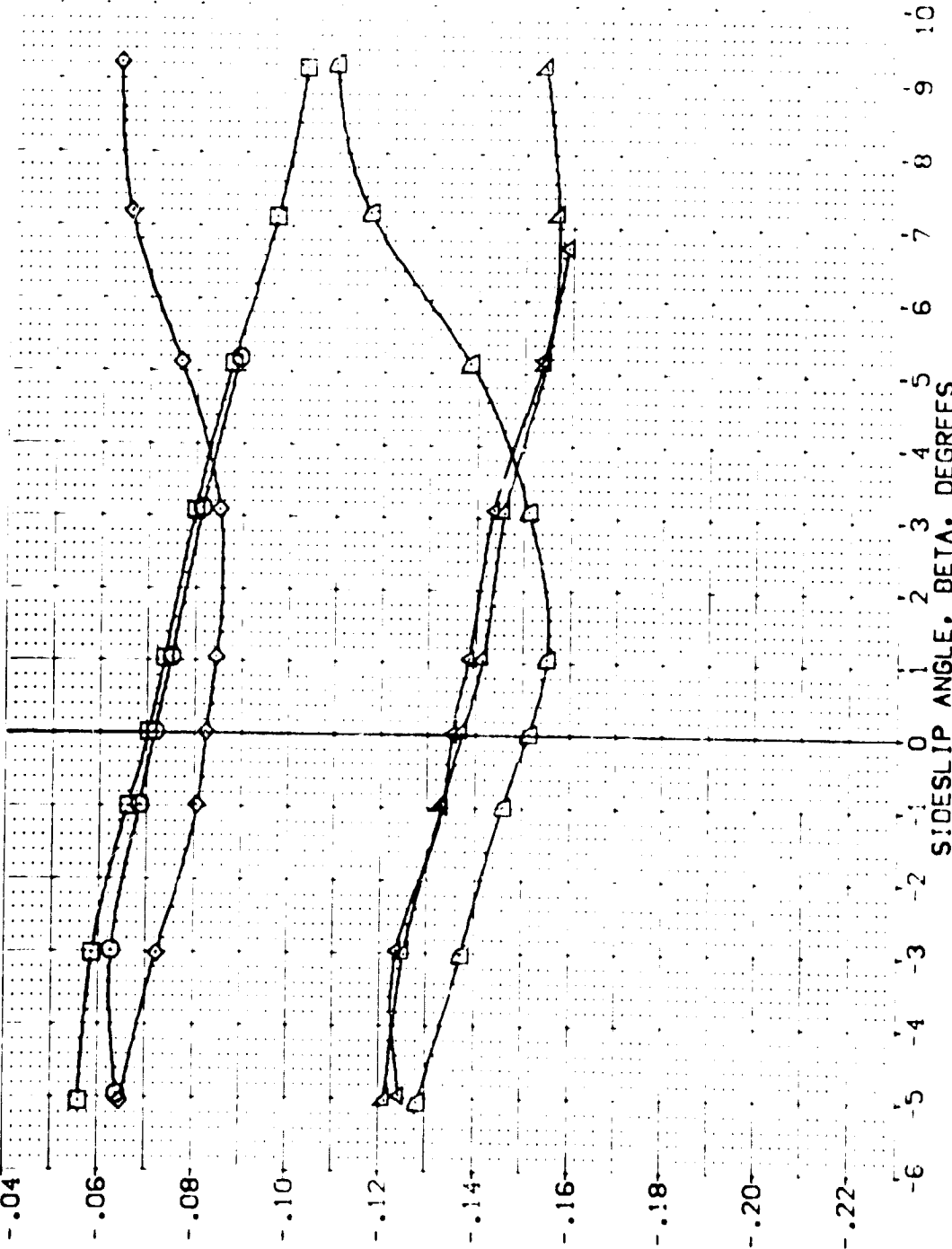


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(B)MAC<sub>r</sub> = .80



DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPEED	REFERENCE INFORMATION
VE-029	□	ARC 11-747 C453A B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
VE-030	○	ARC 11-747 C453A B C M F V	10.000	-10.000	-11.700	25.000	LPRE 14.2440
VE-031	△	ARC 11-747 C453A B C M F V	20.000	-10.000	-11.700	25.000	SPRE 28.1000
VE-032	◇	ARC 11-747 C453A B C M F V	10.000	-10.000	-11.700	55.000	YREF 32.3010
VE-033	□	ARC 11-747 C453A B C M F V	20.000	-10.000	-11.700	55.000	YREF 11.2500
VE-034	○	ARC 11-747 C453A B C M F V	20.000	-10.000	-11.700	55.000	SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

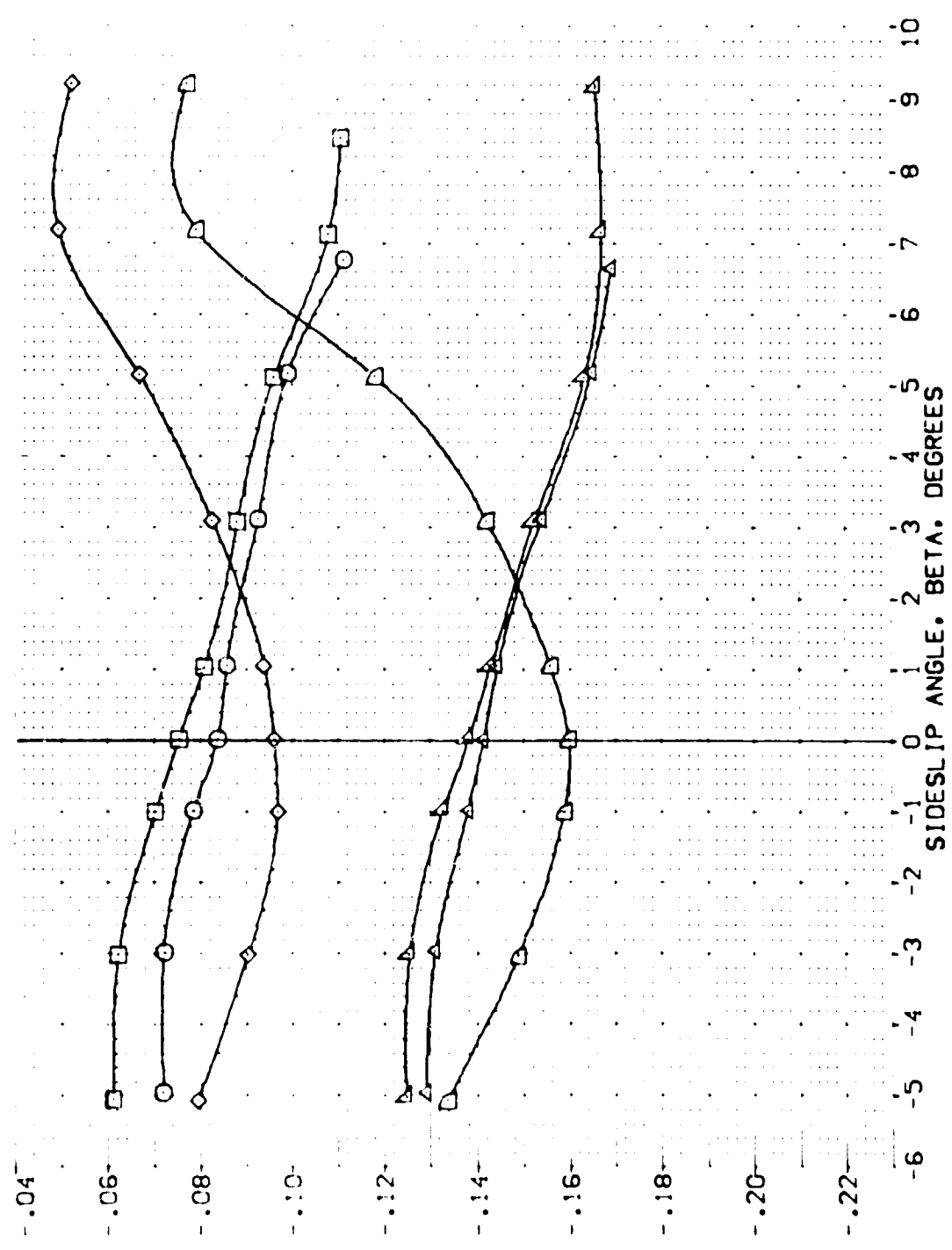


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(C)MAC = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NOTES	RV/L	ALPHA	RUDDER	BOF LAP	SPDBRK	REFERENCE INFORMATION
(YE1029)	ARC 11-747 C-53A B C M F V	V	RV/L	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE1030)	ARC 11-747 C-53A B C M F V	V	RV/L	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(YE1031)	ARC 11-747 C-53A B C M F V	V	RV/L	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
(YE1032)	ARC 11-747 C-53A B C M F V	V	RV/L	.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
(YE1033)	ARC 11-747 C-53A B C M F V	V	RV/L	10.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
(YE1034)	ARC 11-747 C-53A B C M F V	V	RV/L	20.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
(YE1035)	ARC 11-747 C-53A B C M F V	V	RV/L	.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
(YE1036)	ARC 11-747 C-53A B C M F V	V	RV/L	10.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
(YE1037)	ARC 11-747 C-53A B C M F V	V	RV/L	20.000	-10.000	-11.700	55.000	YMRD 32.3010 IN.
								SCALE
								SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

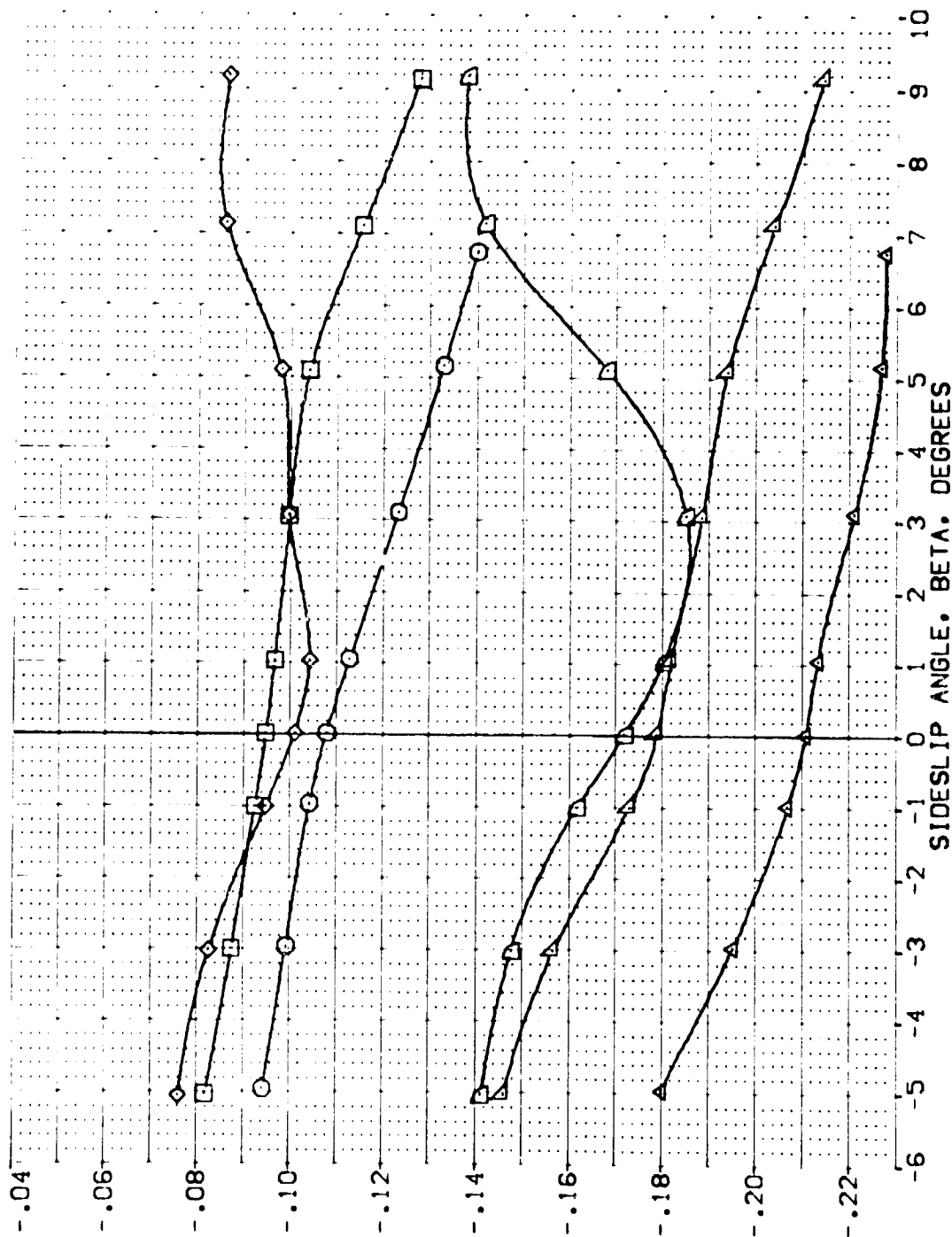


FIG. 33 RUDDER HINGE MOMENTS, -10. DEGREES RUDDER

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ058]	ARC 11-747 DAS3A B C M F VI V	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
[VEJ060]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	25.000	BREF 28.1074
[VEJ051]	ARC 11-747 DAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	YMRP 32.3070
[VEJ052]	ARC 11-747 DAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	ZMRP 11.7550
[VEJ053]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	SCALE 0.0300

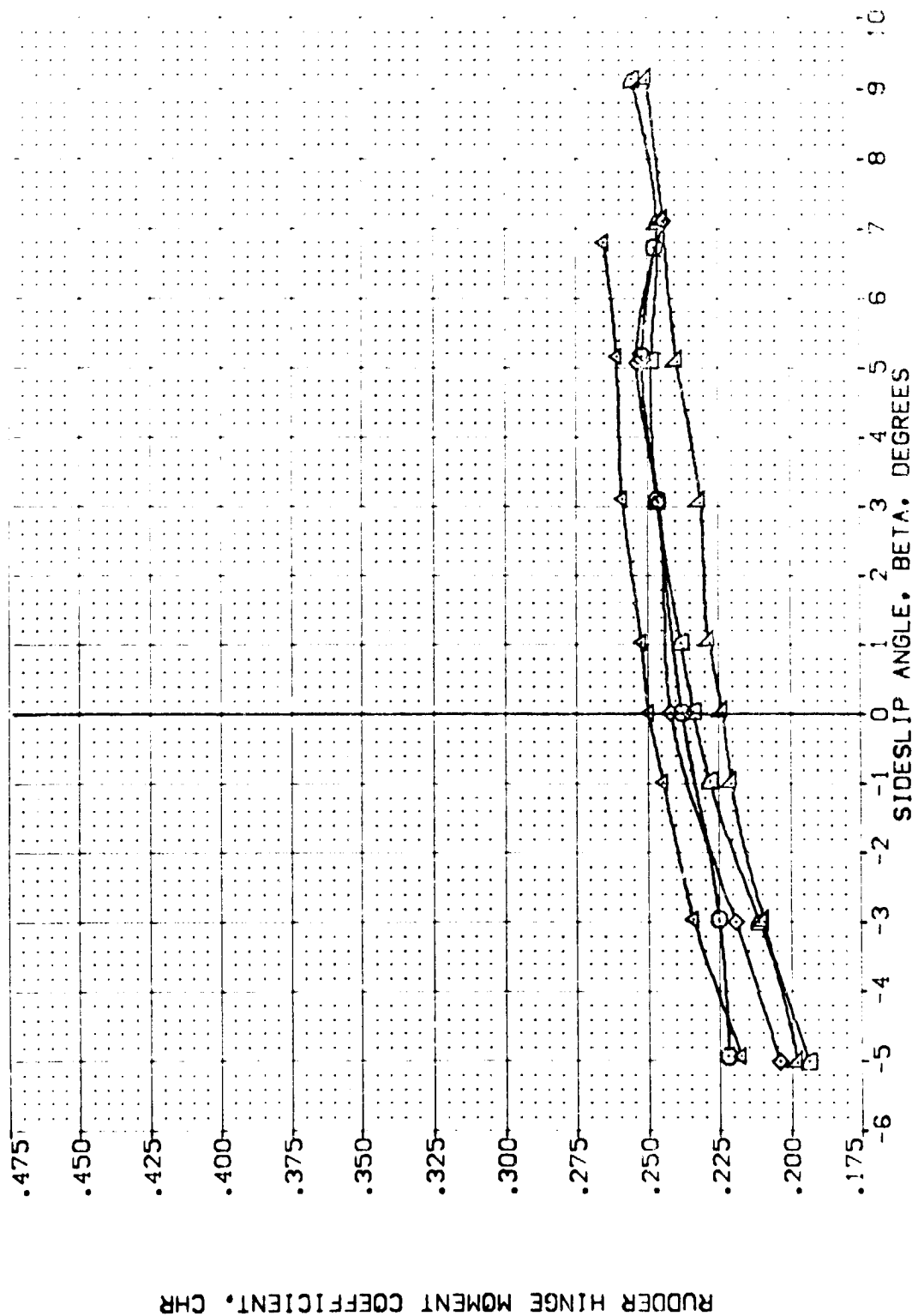


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

( $C_H$ ) $MACH = .60$

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [VEJ058] DATA NOT AVAILABLE  
 [VEJ059] DATA NOT AVAILABLE  
 [VEJ060] DATA NOT AVAILABLE  
 [VEJ061] ARC 11-747 CAS3A B C H F VI V NOM. RV/L  
 [VEJ062] ARC 11-747 CAS3A B C H F VI V NOM. RV/L  
 [VEJ063] ARC 11-747 CAS3A B C H F VI V NOM. RV/L

ALPHA RUDDER BOFLAP SPEEDY  
 .000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 25.000  
 20.000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 55.000  
 20.000 -25.000 -11.700 55.000  
 20.000 -25.000 -11.700 55.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.7410 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

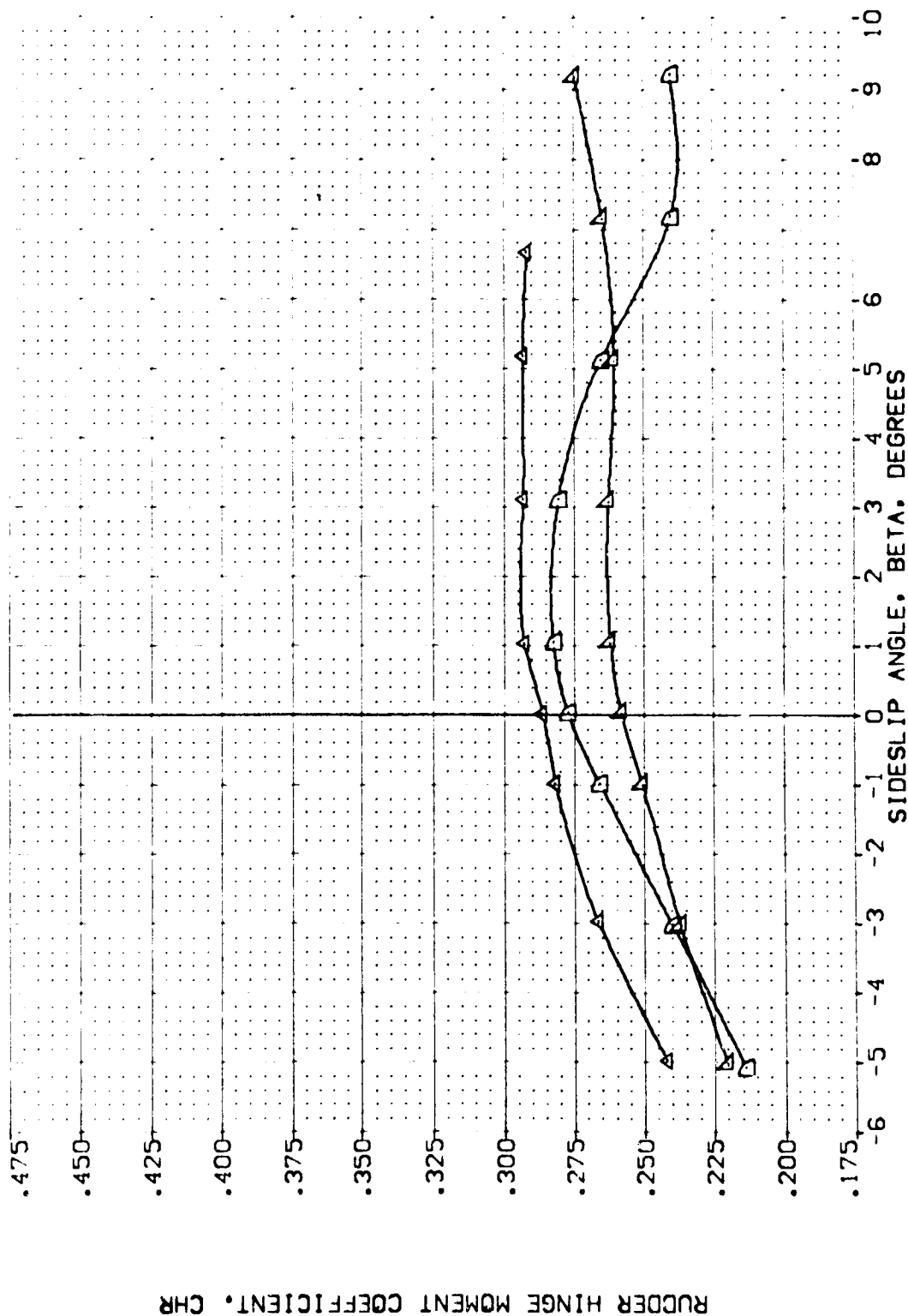


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(B)MACH = .80

DATA SET SYMBL	CONF	IGURATION	DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPDRBK	REFERENCE INFORMATION
[YEJ058]	ARC	11-747	DA53A B C M F V I	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YEJ059]	ARC	11-747	DA53A B C M F V I	10.000	-25.000	-11.700	25.000	LREF 14.2440 IN.
[YEJ060]	ARC	11-747	DA53A B C M F V I	20.000	-25.000	-11.700	25.000	BREF 28.1004 IN.
[YEJ061]	ARC	11-747	DA53A B C M F V I	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[YEJ062]	ARC	11-747	DA53A B C M F V I	20.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[YEJ063]	ARC	11-747	DA53A B C M F V I	20.000	-25.000	-11.700	55.000	SCALE .0300

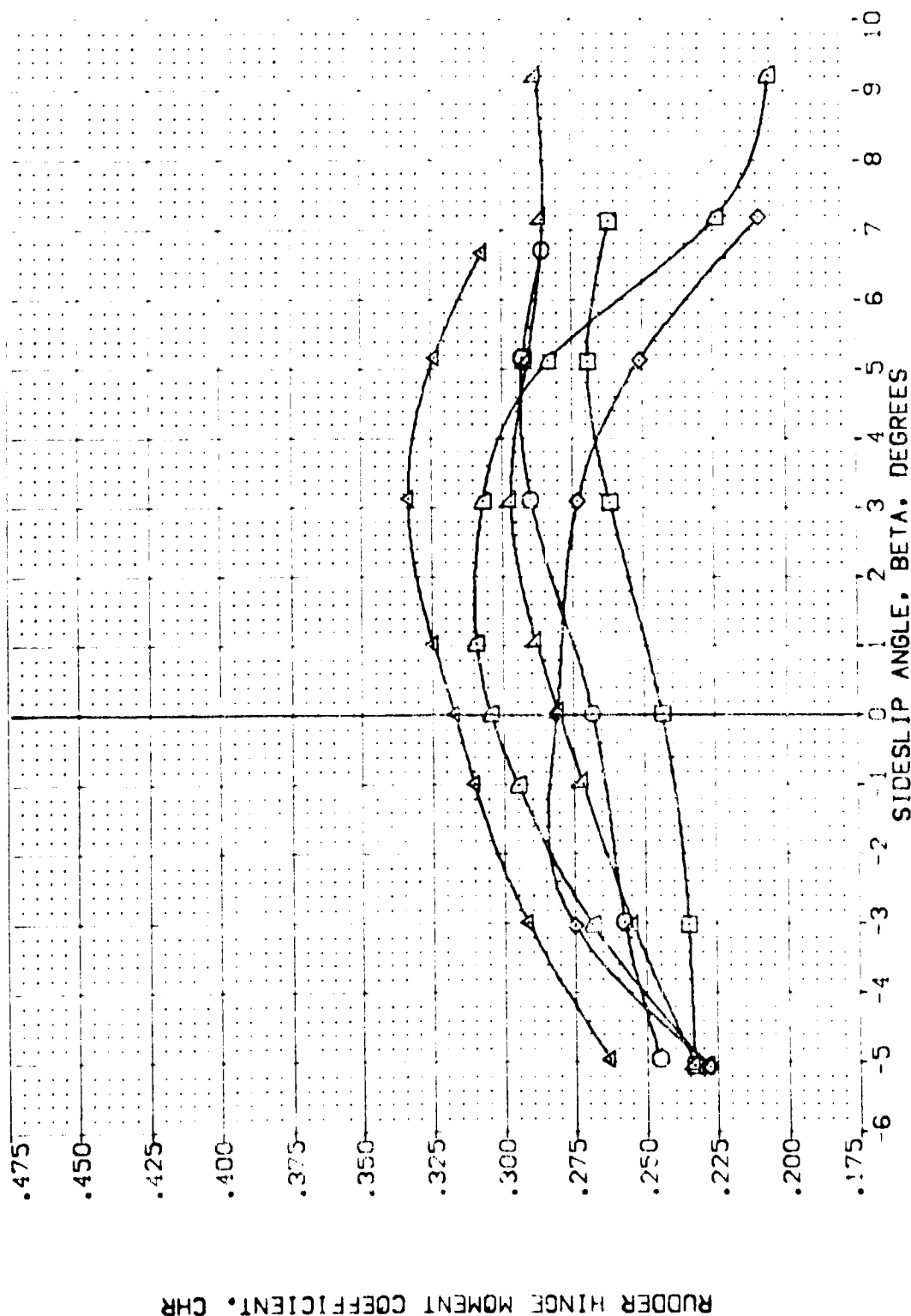


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MACP = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ058)	DATA NOT AVAILABLE	.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ059)	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
(VEJ060)	DATA NOT AVAILABLE	20.000	-25.000	-11.700	25.000	BREF 28.1004
(VEJ061)	ARC 11-747 C453A B C M F V I V NOM, RV/L	.000	-25.000	-11.700	55.000	XMRP 32.3010
(VEJ062)	ARC 11-747 C453A B C M F V I V NOM, RV/L	10.000	-25.000	-11.700	55.000	YMRP .0000
(VEJ063)	ARC 11-747 C453A B C M F V I V NOM, RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

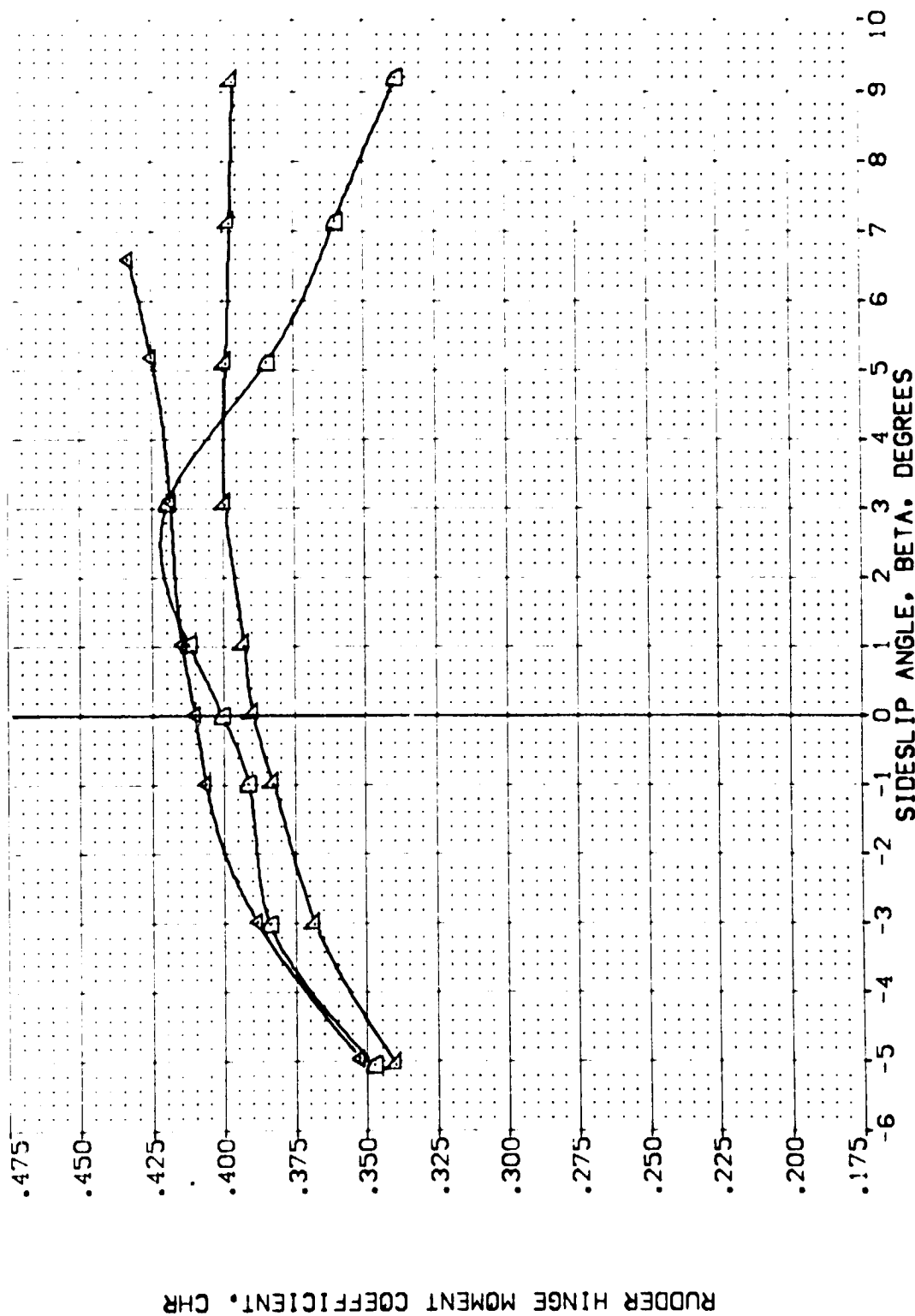


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MACH = 1.05

DATA SET SYMBO	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
[VEJ058]	ARC 11-747 DAS3A B C M F VI V	.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
[VEJ060]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	25.000	BREF 28.1004
[VEJ051]	ARC 11-747 DAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	XMRP 32.3010
[VEJ052]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	YMRP .0000
[VEJ053]	ARC 11-747 DAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500
						SCALE .0300

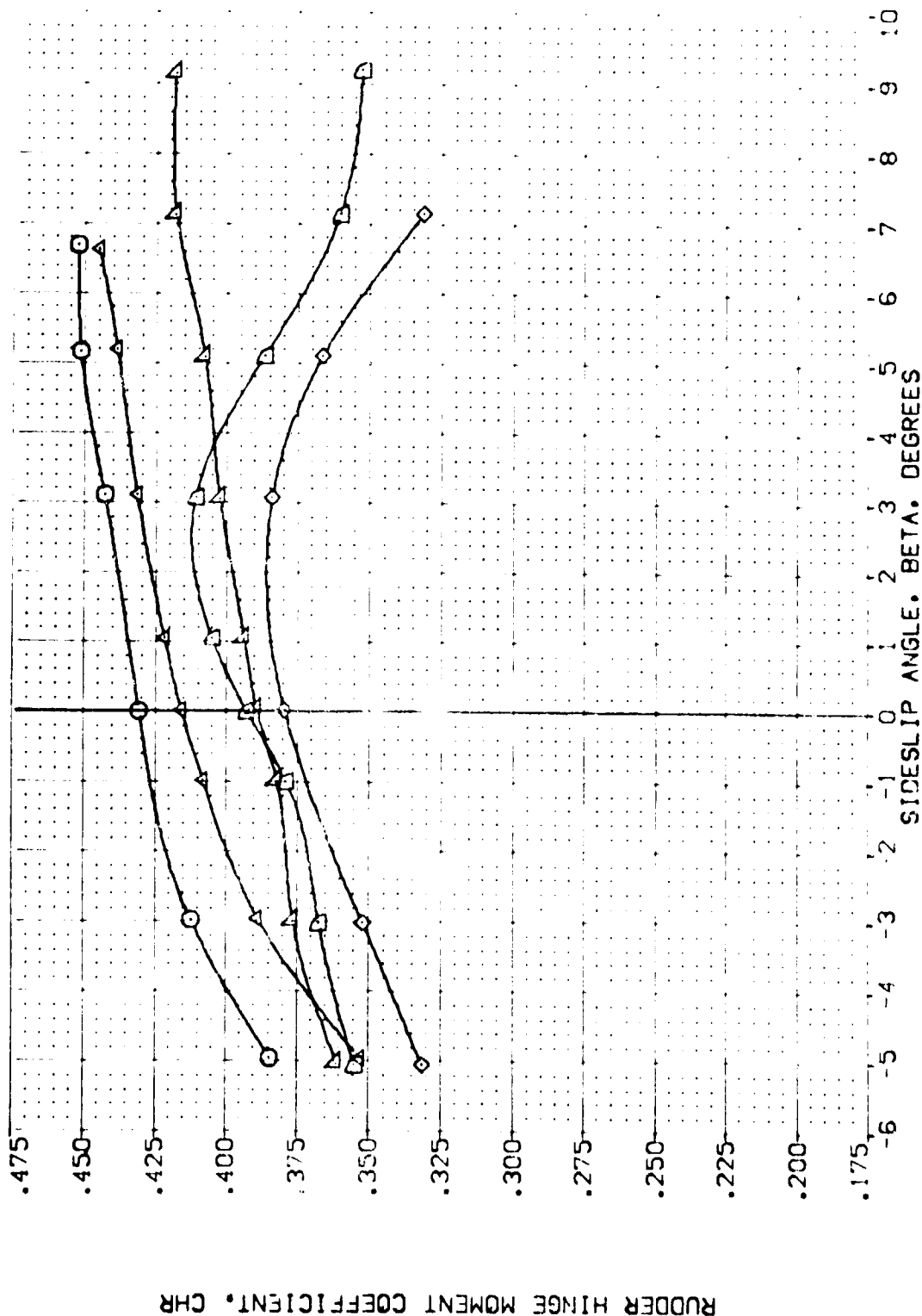


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(E)MACH = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
[YE4258]	ARC 11-747 DA53A B C H F VI V	0.00	25.000	-11.700	75.000	SREF 2.4210 SQ.FT.
[YE4259]	DATA NOT AVAILABLE	10.000	25.000	-11.700	75.000	LREF 14.2440
[YE4260]	ARC 11-747 DA53A B C H F VI V	20.000	25.000	-11.700	75.000	BREF 28.1004
[YE4261]	ARC 11-747 DA53A B C H F VI V	10.000	25.000	-11.700	75.000	XREF 32.3010
[YE4262]	ARC 11-747 DA53A B C H F VI V	10.000	25.000	-11.700	75.000	YREF 11.2500
[YE4263]	ARC 11-747 DA53A B C H F VI V	10.000	25.000	-11.700	75.000	ZREF 11.2500
						SCALE 10.000

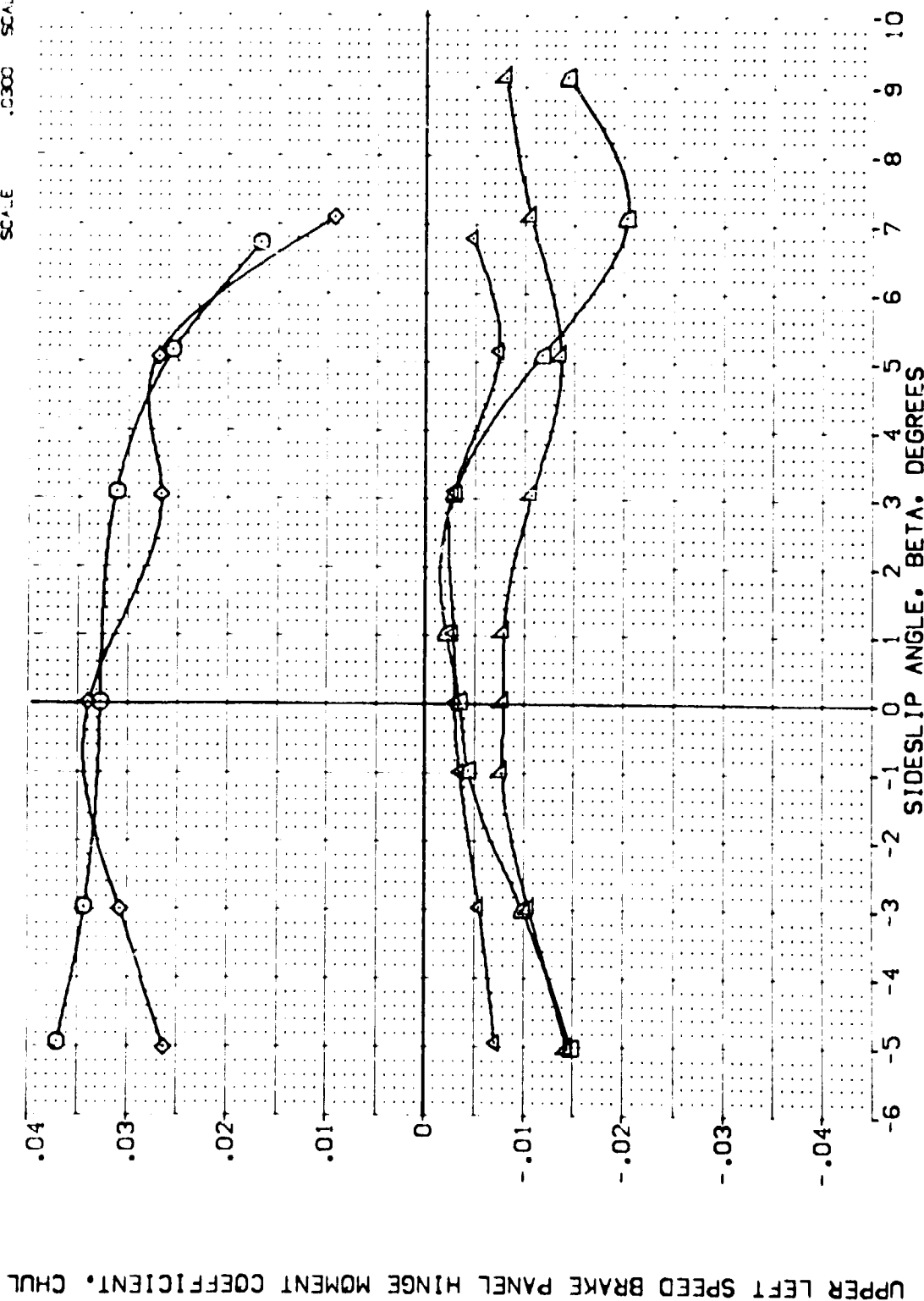


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[VEJ058] DATA NOT AVAILABLE

[VEJ059] DATA NOT AVAILABLE

[VEJ060] DATA NOT AVAILABLE

[VEJ051] ARC 11-747 DA53A B C H F VI V NOT: RV/L

[VEJ052] ARC 11-747 DA53A B C H F VI V NOT: RV/L

[VEJ053] ARC 11-747 DA53A B C H F VI V NOT: RV/L

ALPHA RUDDER BDE LAP SPEEDS

0.000 -25.000 -11.700 25.000

10.000 -25.000 -11.700 25.000

20.000 -25.000 -11.700 25.000

10.000 -25.000 -11.700 25.000

20.000 -25.000 -11.700 25.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440

BREF 28.1000

XREF 32.3010

YREF 11.0000

ZREF 11.2500

SCALE .0300

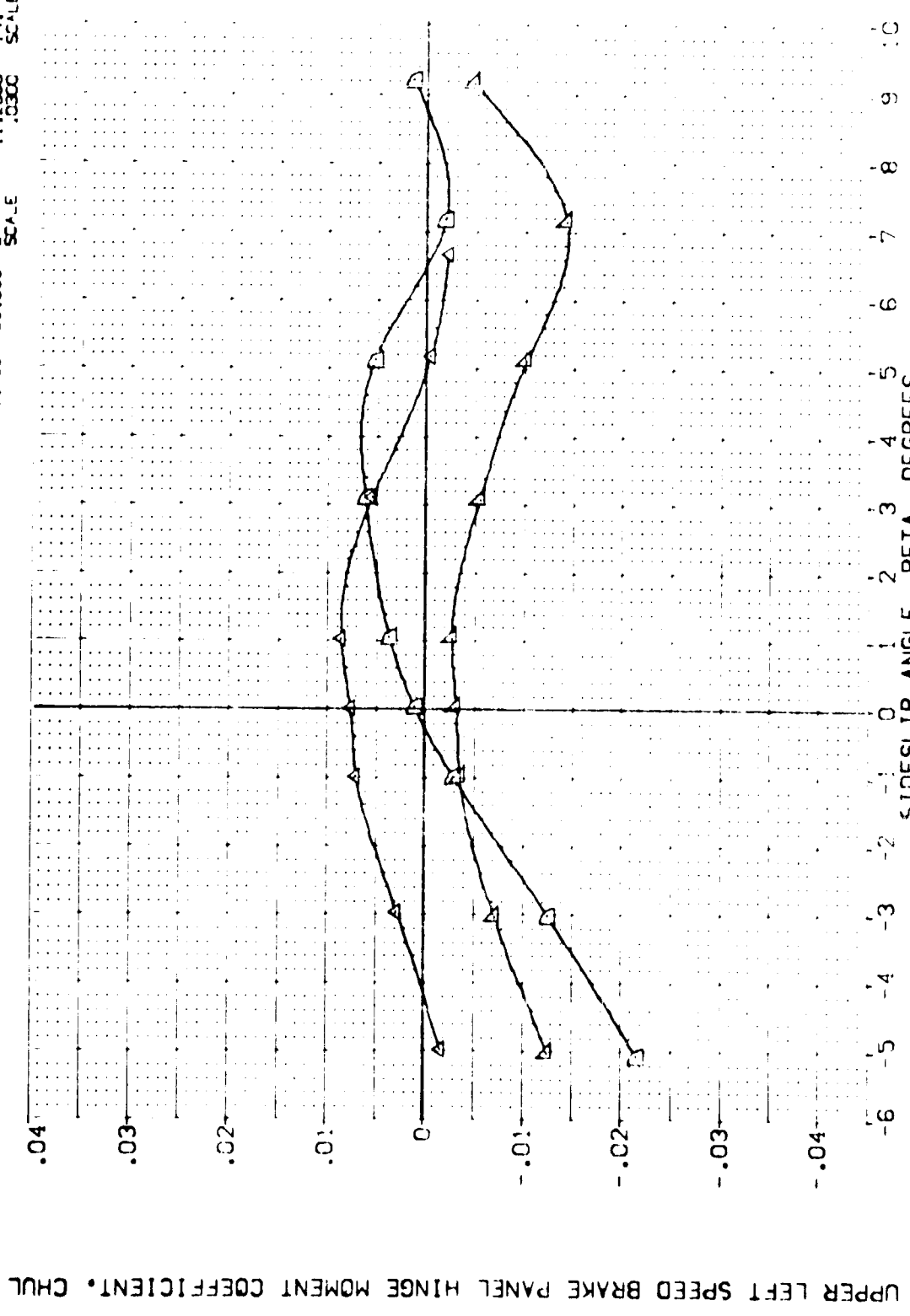


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
[VEJ058]	ARC 11-747 DAS3A B C M F V1	.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	ARC 11-747 DAS3A B C M F V1	10.000	-25.000	-11.700	25.000	LREF 14.2440
[VEJ060]	ARC 11-747 DAS3A B C M F V1	20.000	-25.000	-11.700	25.000	BREF 28.1004
[VEJ061]	ARC 11-747 DAS3A B C M F V1	10.000	-25.000	-11.700	55.000	KREF 32.3010
[VEJ062]	ARC 11-747 DAS3A B C M F V1	20.000	-25.000	-11.700	55.000	YREF 11.2500
[VEJ063]	ARC 11-747 DAS3A B C M F V1	20.000	-25.000	-11.700	55.000	ZREF .0300 SCALE

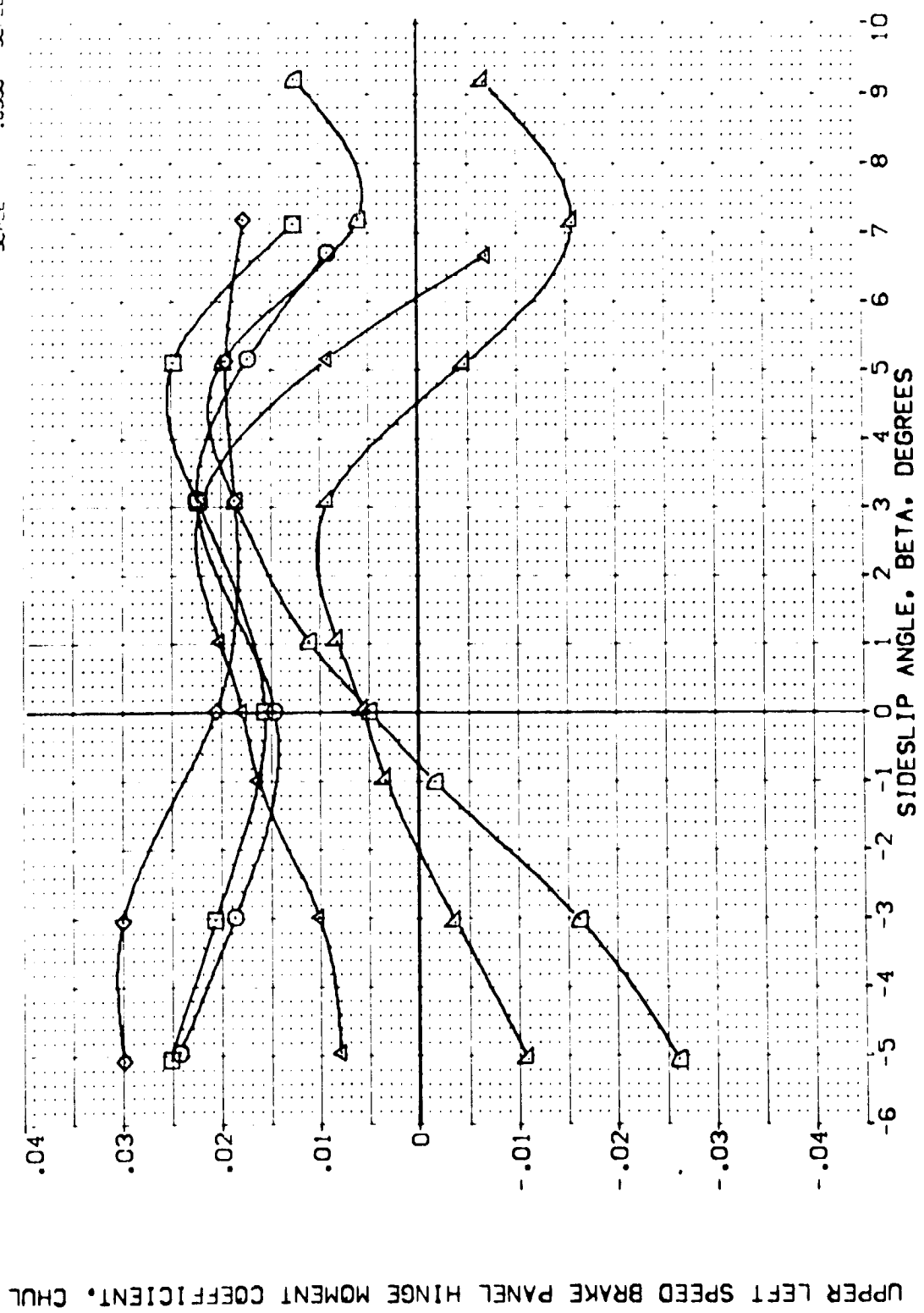


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [VEJ058] DATA NOT AVAILABLE  
 [VEJ059] DATA NOT AVAILABLE  
 [VEJ060] DATA NOT AVAILABLE  
 [VEJ061] ARC 11-747 DA53A B C M F VI V NON: RN/L  
 [VEJ062] ARC 11-747 DA53A B C M F VI V NON: RN/L  
 [VEJ063] ARC 11-747 DA53A B C M F VI V NON: RN/L

ALPHA RUDDER BDF LAP SPEED BRK REFERENCE INFORMATION  
 .000 -25.000 -11.700 25.000 SREF 2.4210 SQ.FT.  
 10.000 -25.000 -11.700 25.000 LREF 14.2440 IN.  
 20.000 -25.000 -11.700 25.000 BREF 28.1004 IN.  
 10.000 -25.000 -11.700 55.000 XMRP 32.3010 IN.  
 20.000 -25.000 -11.700 55.000 YMRP 11.2500 IN.  
 20.000 -25.000 -11.700 55.000 ZMRP 1.0300 IN.  
 SCALE

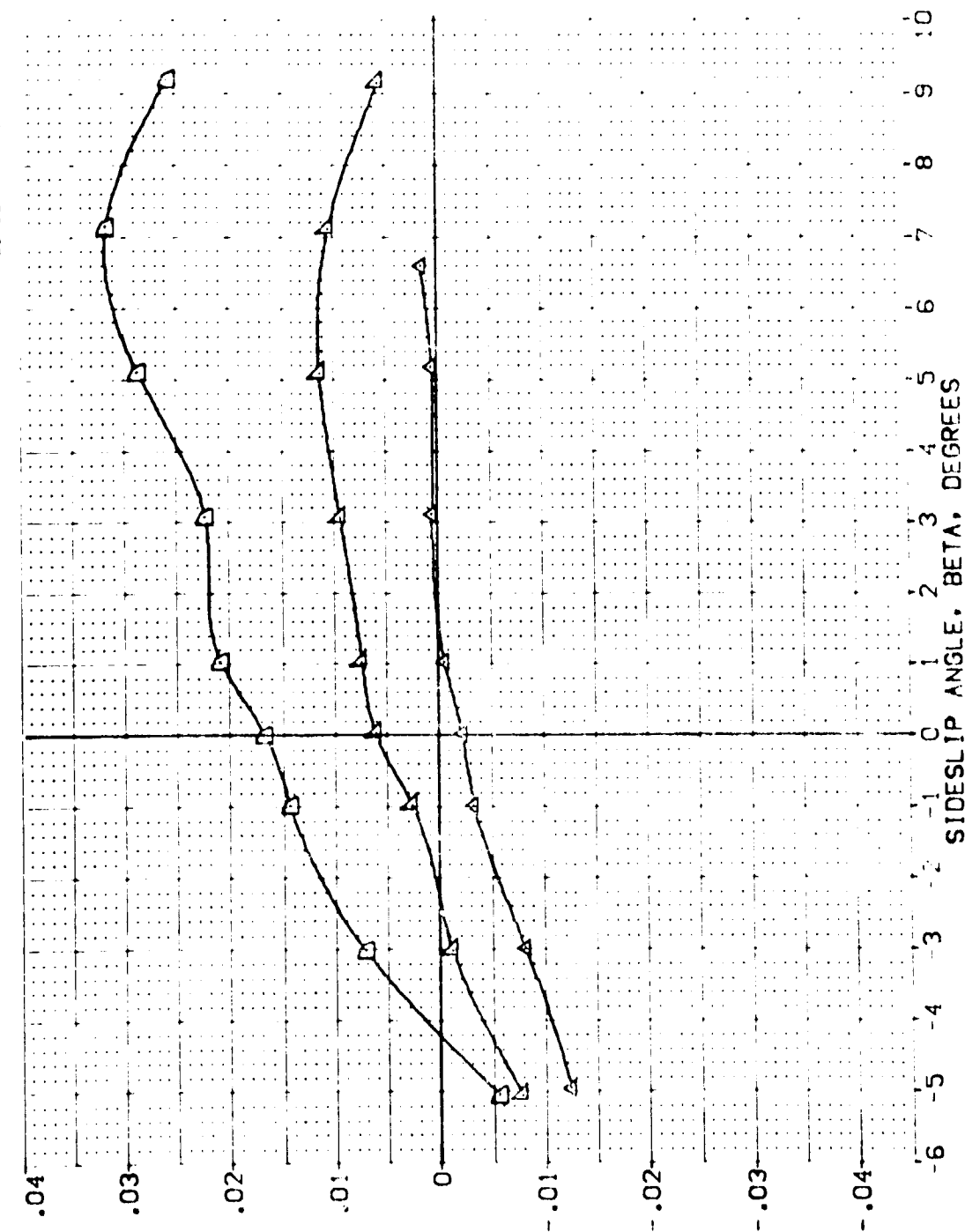


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON, RV/L	ALPHA	RUDDER	BOF LAP	SPODBK	REFERENCE INFORMATION
[VEJ058]	ARC 11-747 DA53A B C H F VI V	NON, RV/L	.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	DATA NOT AVAILABLE		10.000	-25.000	-11.700	25.000	LREF 14.2440 IN.
[VEJ060]	ARC 11-747 DA53A B C H F VI V	NON, RV/L	20.000	-25.000	-11.700	25.000	BREF 28.1004 IN.
[VEJ061]	ARC 11-747 DA53A B C H F VI V	NON, RV/L	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[VEJ062]	ARC 11-747 DA53A B C H F VI V	NON, RV/L	20.000	-25.000	-11.700	55.000	YMRP 11.2500 IN.
[VEJ063]	ARC 11-747 DA53A B C H F VI V	NON, RV/L	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
							SCALE .0300

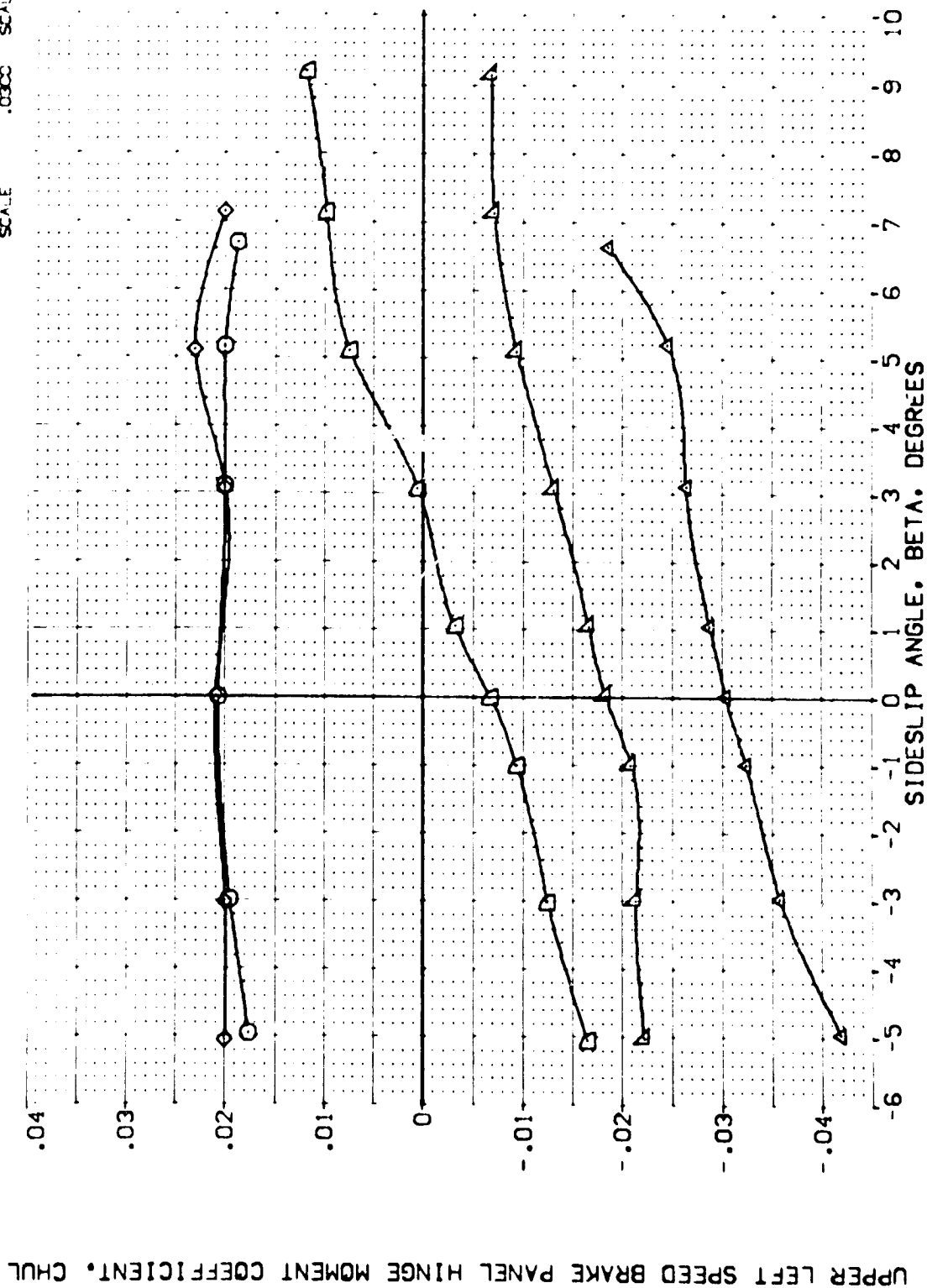


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(E)MAC- = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	ALUOER	BOF LAP	SPORBK	REFERENCE INFORMATION
[VEJ.059]	ARC 11-747 CAS3A B C H F VI	00	00	1-700	25,000	SREF 2-4210 SQ.FT.
[VEJ.058]	DATA NOT AVAILABLE	00	00	1-700	25,000	LREF 14-2440
[VEJ.060]	ARC 11-747 CAS3A B C H F VI	10	00	1-700	25,000	BREF 28-1004
[VEJ.051]	ARC 11-747 CAS3A B C H F VI	20	00	1-700	25,000	XPRP 30-3010
[VEJ.052]	ARC 11-747 CAS3A B C H F VI	10	00	1-700	25,000	YPRP 30-0000
[VEJ.053]	ARC 11-747 CAS3A B C H F VI	20	00	1-700	25,000	ZPRP 11-2500
						SCALE .0300

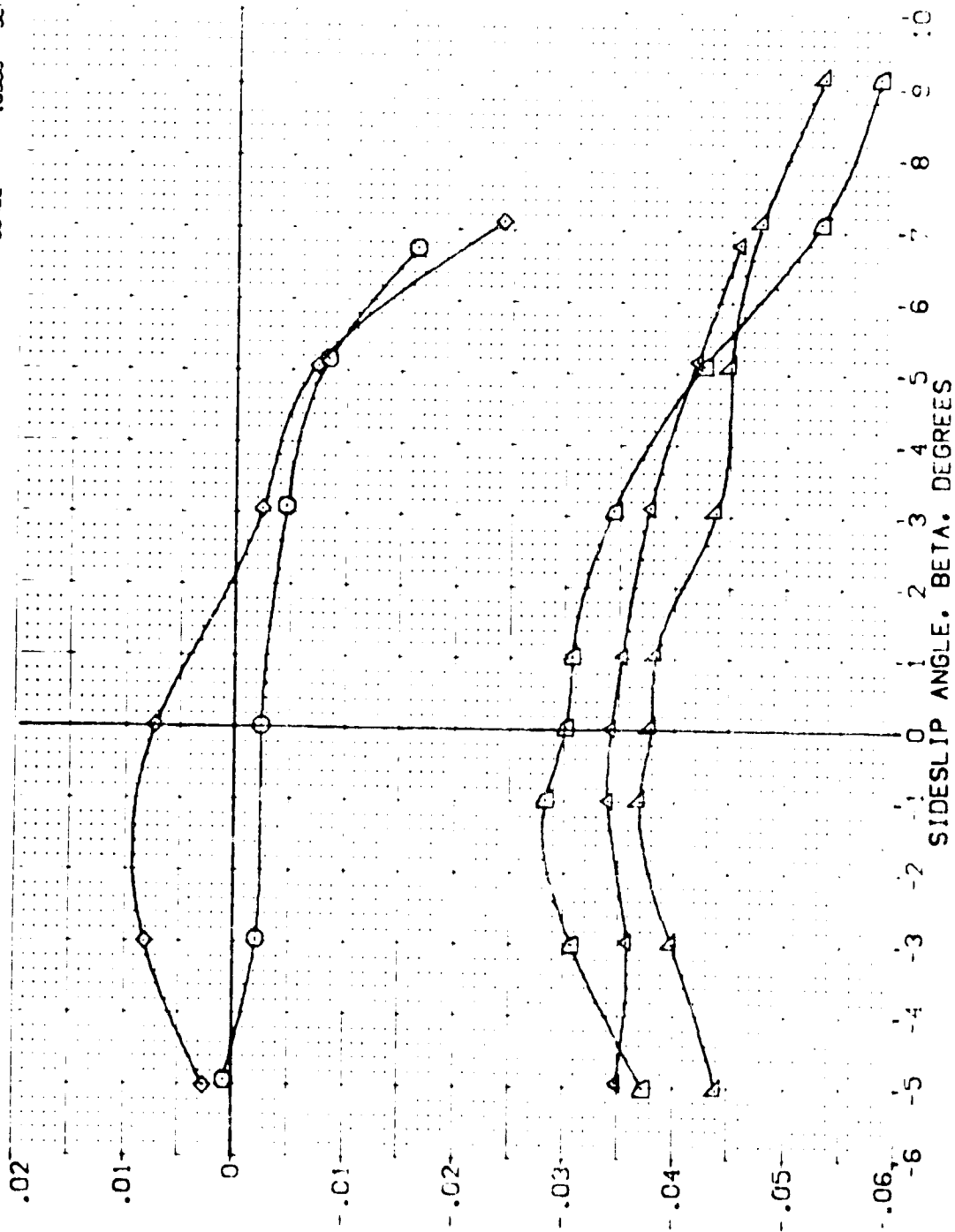


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

09. = -374C-

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDFLAP	SPOBBY	REFERENCE INFORMATION
[VEJ058]	DATA NOT AVAILABLE	.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
[VEJ060]	DATA NOT AVAILABLE	20.000	-25.000	-11.700	25.000	BREF 28.1004
[VEJ061]	ARC 11-747 C453A B C H F V I V	10.000	-25.000	-11.700	55.000	YREF 32.3010
[VEJ062]	ARC 11-747 C453A B C H F V I V	10.000	-25.000	-11.700	55.000	YREF 32.3010
[VEJ063]	ARC 11-747 C453A B C H F V I V	20.000	-25.000	-11.700	55.000	YREF 32.3010
						SCALE

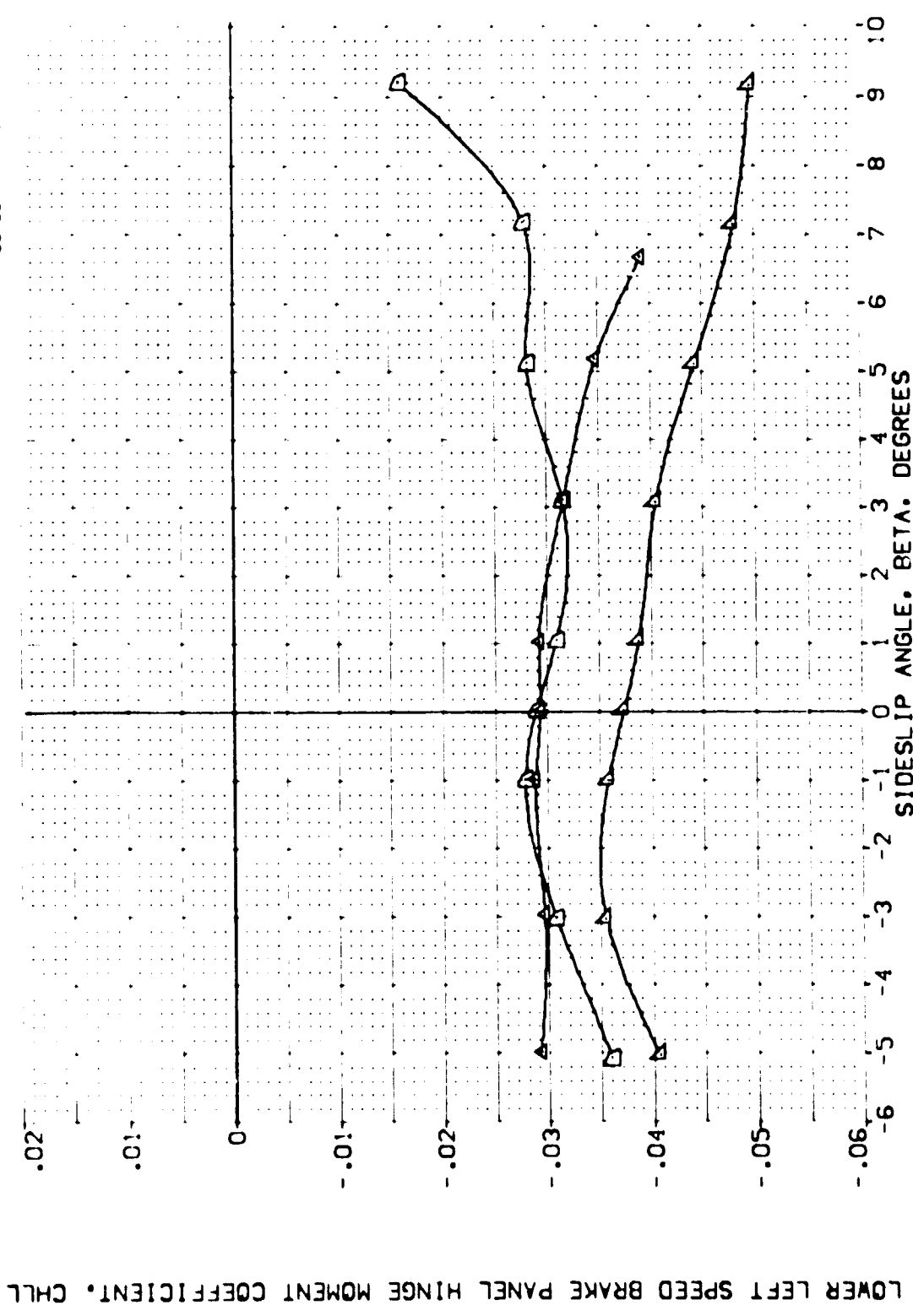


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDK	REFERENCE INFORMATION
(VEJ059)	ARC 11-747 DASSA B C H F VI	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VEJ059)	ARC 11-747 DASSA B C H F VI	10.000	-25.000	-11.700	25.000	LREF 14.2440
(VEJ059)	ARC 11-747 DASSA B C H F VI	20.000	-25.000	-11.700	25.000	BREF 28.1004
(VEJ051)	ARC 11-747 DASSA B C H F VI	10.000	-25.000	-11.700	55.000	VMPP 32.3010
(VEJ052)	ARC 11-747 DASSA B C H F VI	10.000	-25.000	-11.700	55.000	ZMPP 11.2500
(VEJ053)	ARC 11-747 DASSA B C H F VI	20.000	-25.000	-11.700	55.000	SCALE 0.000 SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

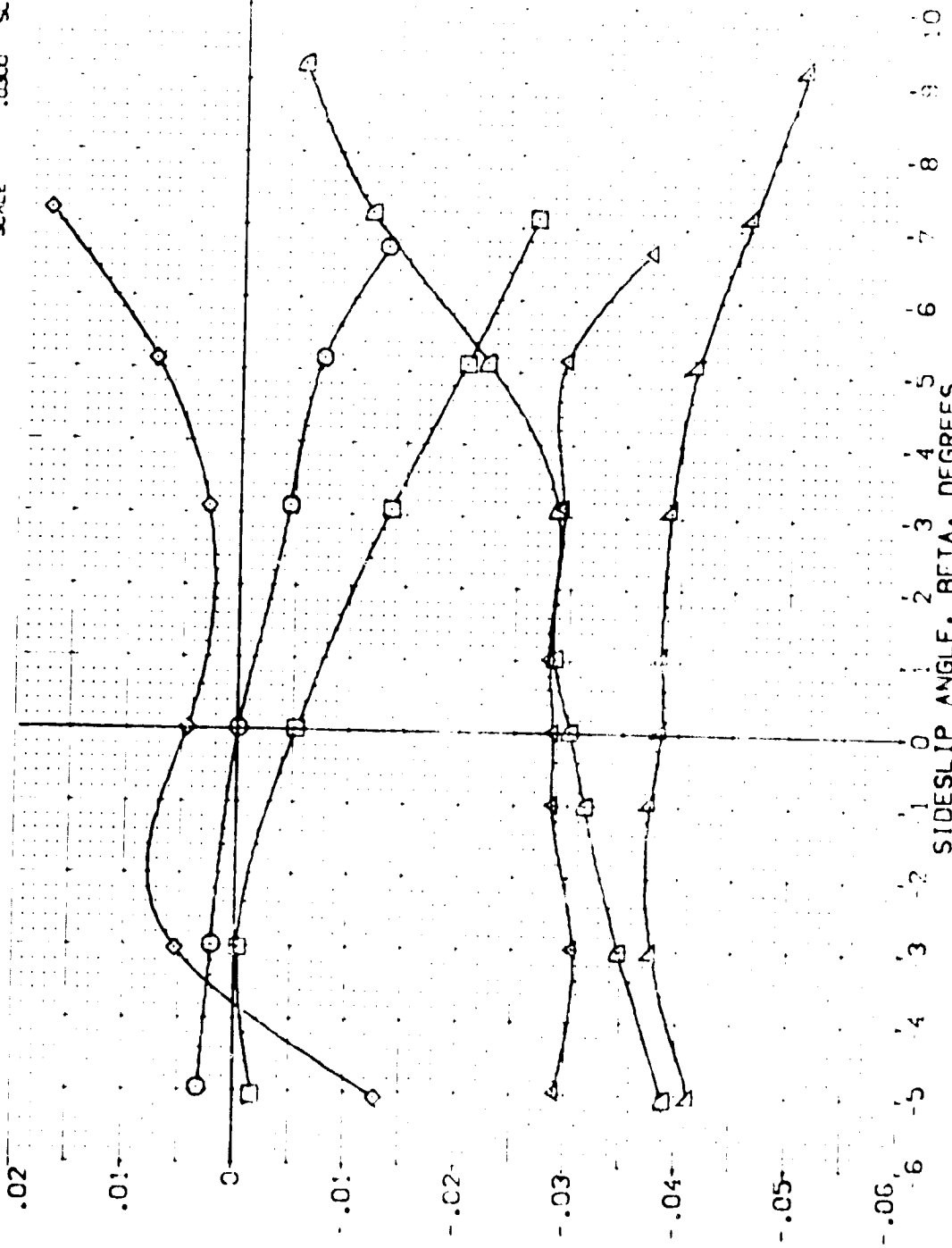


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MAC = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SP0BRY	REFERENCE INFORMATION
(YF058)	DATA NOT AVAILABLE	.000	-25.000	-1.700	25.000	SREF 2.4210 SQ.FT.
(YF059)	DATA NOT AVAILABLE	10.000	-25.000	-1.700	25.000	LREF 14.2440
(YF060)	DATA NOT AVAILABLE	20.000	-25.000	-1.700	25.000	BR F 28.1004
(YF061)	ARC 11-747 C453A B C M F V	.000	-25.000	-1.700	55.000	AMPO 30.3010
(YF062)	ARC 11-747 C453A B C M F V	10.000	-25.000	-1.700	55.000	YMRP .0000
(YF063)	ARC 11-747 C453A B C M F V	20.000	-25.000	-1.700	55.000	ZMRP 11.2520
						SCALE 1000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

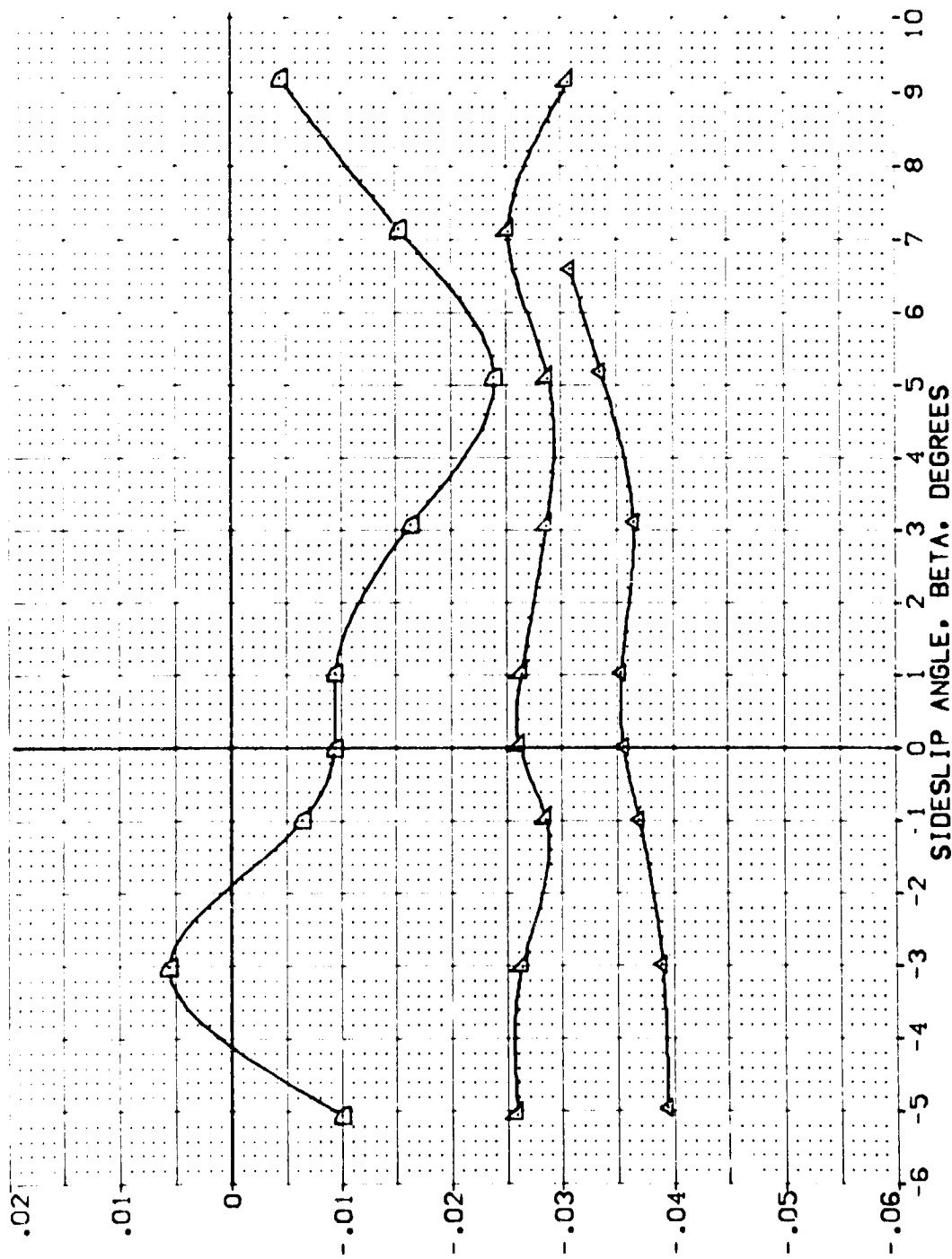


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(D)MACH = 1.05

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBK	REFERENCE INFORMATION
[YFJ058]	ARC 11-747 GAS3A B C M F VI V	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YFJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440 IN.
[YFJ060]	ARC 11-747 GAS3A B C M F VI V	20.000	-25.000	-11.700	25.000	BREF 28.1004 IN.
[YFJ061]	ARC 11-747 GAS3A B C M F VI V	10.000	-25.000	-11.700	55.000	XMRP 32.3010 IN.
[YFJ062]	ARC 11-747 GAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	YMRP 11.0000 IN.
[YFJ063]	ARC 11-747 GAS3A B C M F VI V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 IN.
						SCALE .0300

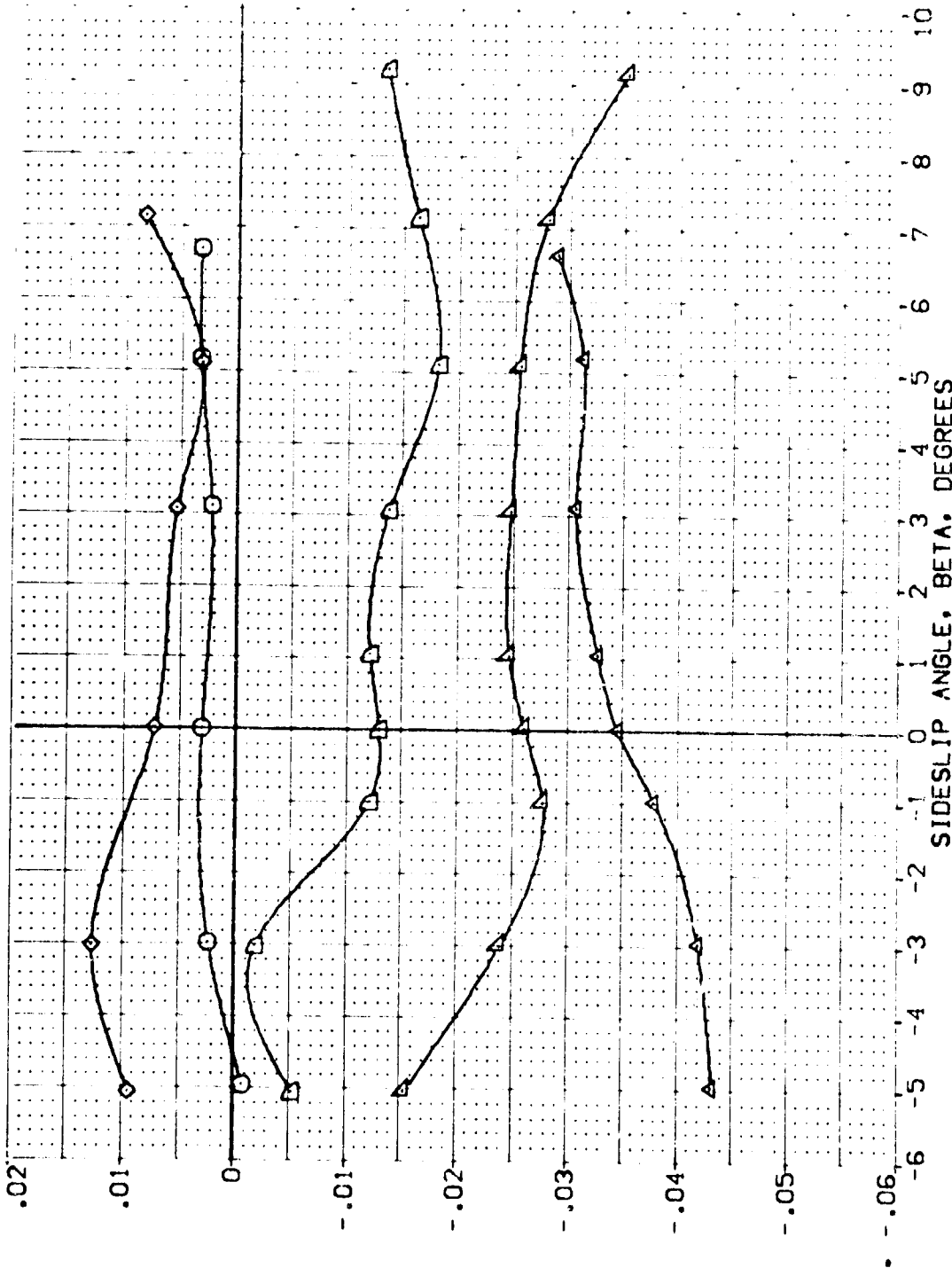


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(V4)058	ARC 11-747 BAS3A B C M F VI V	0.000	-25.000	-1.700	25.000	SREF 2.4210 SQ.FT.
(V4)059	DATA NOT AVAILABLE	10.000	-25.000	-1.700	25.000	LRP 14.2440
(V4)060	ARC 11-747 BAS3A B C M F VI V	20.000	-25.000	-1.700	25.000	BRP 28.1004
(V4)061	ARC 11-747 BAS3A B C M F VI V	10.000	-25.000	-1.700	55.000	ANP 32.3010
(V4)062	ARC 11-747 BAS3A B C M F VI V	20.000	-25.000	-1.700	55.000	YAP 11.2500
(V4)063	ARC 11-747 BAS3A B C M F VI V	20.000	-25.000	-1.700	55.000	SCALE 11.2500 SCALE

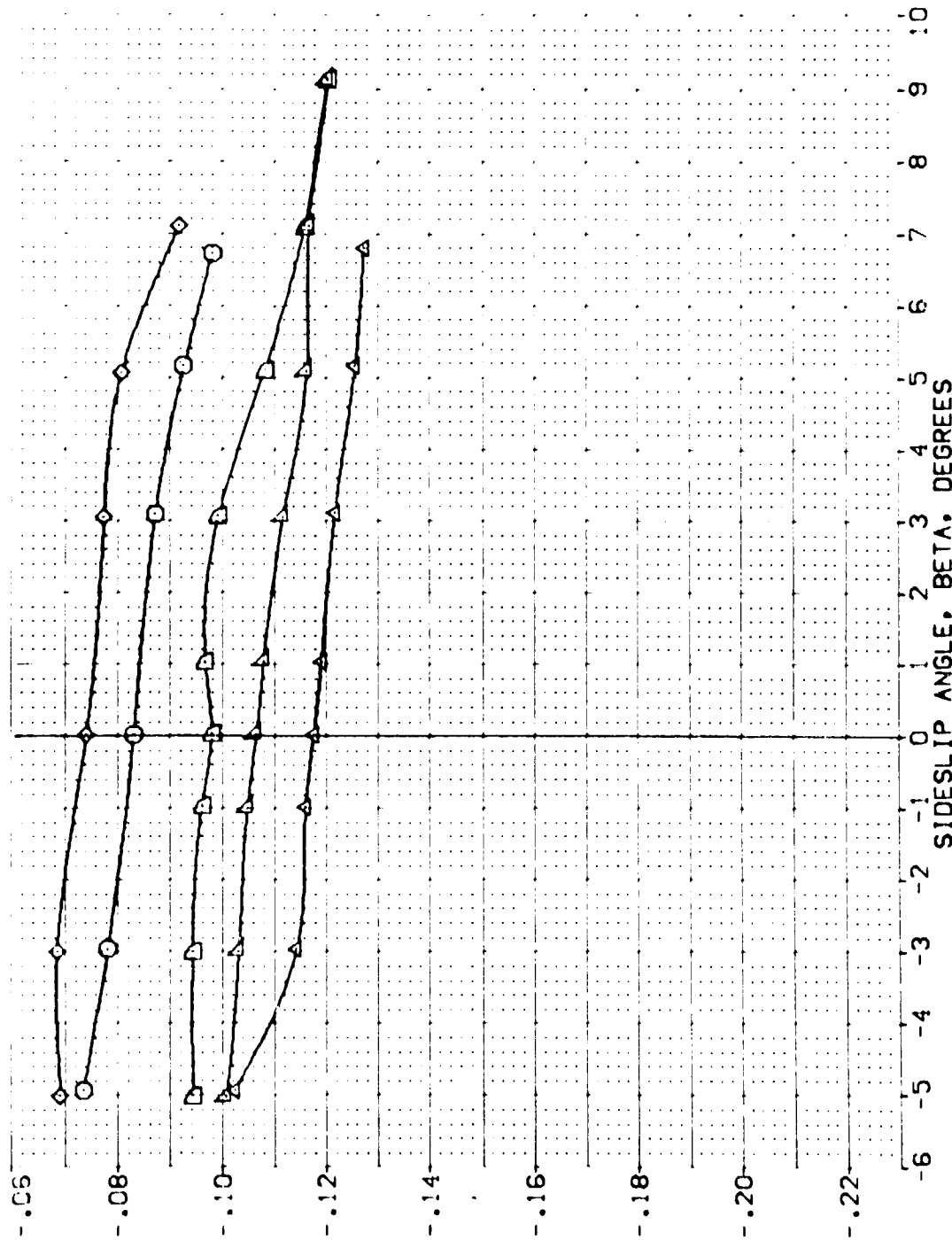


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(A)MAC = .60



UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPEED	REFERENCE INFORMATION
Y4058	DATA NOT AVAILABLE	0.00	-25.000	-11.700	25.000	SREF 2.4210 SQ. FT.
Y4059	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
Y4060	DATA NOT AVAILABLE	20.000	-25.000	-11.700	25.000	BREF 28.1004
Y4061	ARC 11-747 CAS3A B C H F V V	10.000	-25.000	-11.700	55.000	XMRD 32.3010
Y4062	ARC 11-747 CAS3A B C H F V V	10.000	-25.000	-11.700	55.000	YMRD 32.3000
Y4063	ARC 11-747 CAS3A B C H F V V	20.000	-25.000	-11.700	55.000	ZMRD 11.2500
						SCALE

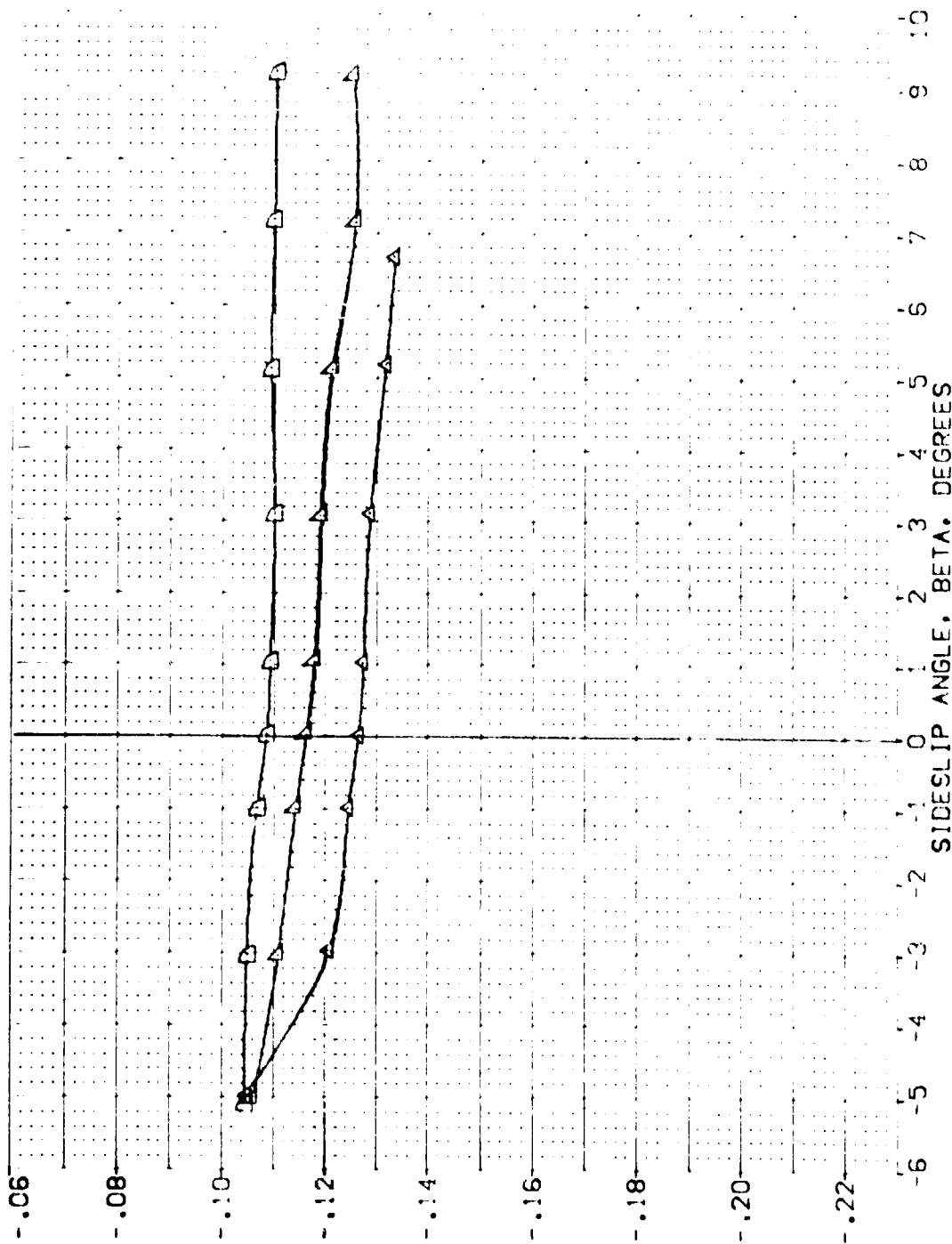


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(B)MAC = .80

ALPHA	RUBBER	BOF LAP	SPOBRY	REFERENCE INFORMATION	SC. FT.
000	-25.000	-1.700	25.000	SREF	2.4210
0.000	-25.000	-1.700	25.000	LREF	14.2440
2.000	-25.000	-1.700	25.000	BREF	28.1004
0.000	-25.000	-1.700	55.000	X-500	32.3610
0.000	-25.000	-1.700	55.000	Y-500	0000
20.000	-25.000	-1.700	55.000	Z-500	11.2500
				SCALE	0.000
					SCALE

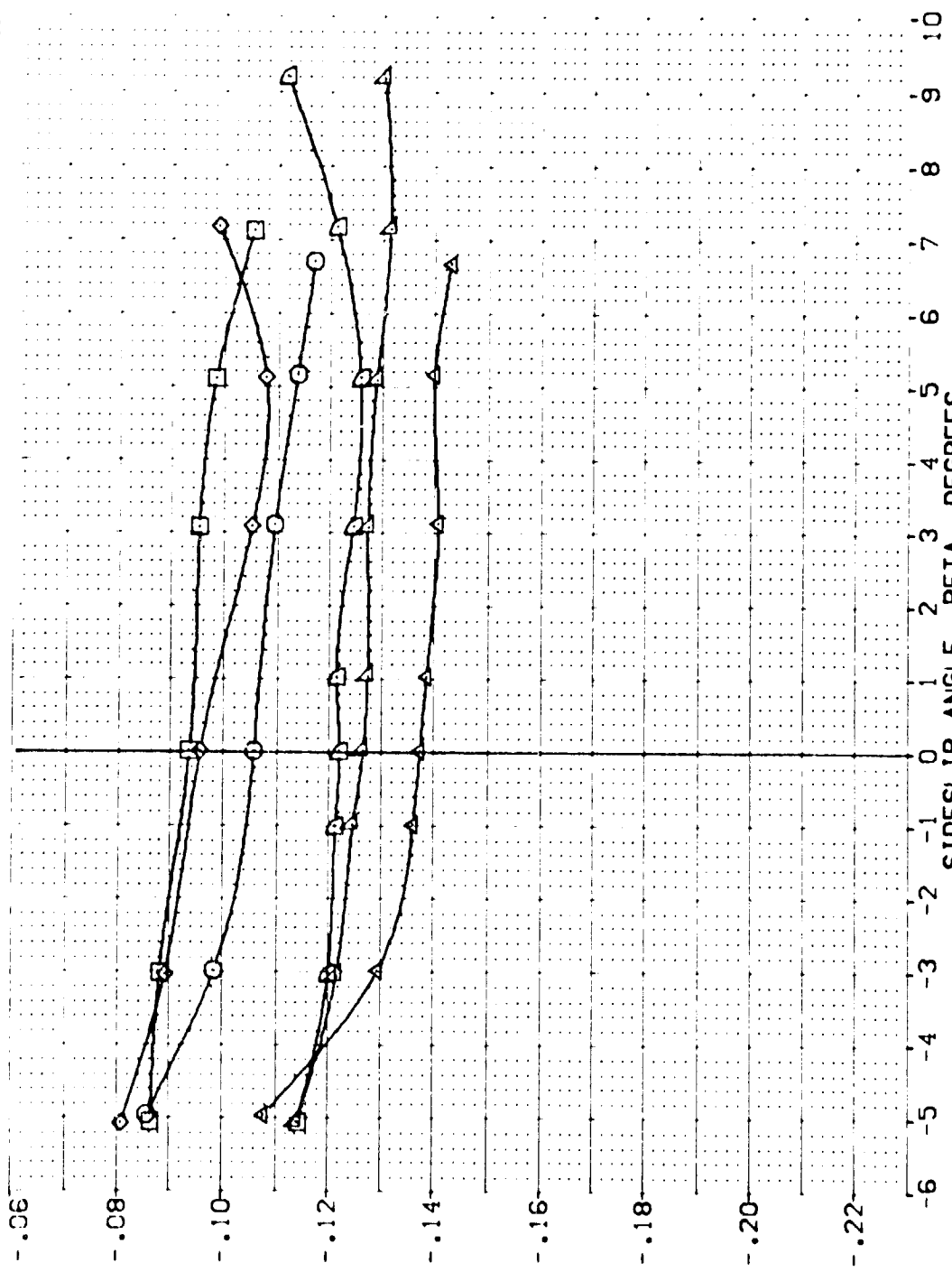


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

$$[C]_{MAC} = .90$$

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[VEJ058] DATA NOT AVAILABLE

[VEJ059] DATA NOT AVAILABLE

[VEJ060] DATA NOT AVAILABLE

[VEJ061] ARC 11-747 DASSA B C M F VI V NOT: RN/L

[VEJ062] ARC 11-747 DASSA B C M F VI V NOT: RN/L

[VEJ063] ARC 11-747 DASSA B C M F VI V NOT: RN/L

ALPHA RUDDER BDF LAP SPOBRK

0.000 -25.000 -11.700 25.000

10.000 -25.000 -11.700 25.000

20.000 -25.000 -11.700 25.000

10.000 -25.000 -11.700 25.000

20.000 -25.000 -11.700 25.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 28.000 IN.

YMRP 32.000 IN.

ZMRP 11.7500 IN.

SCALE .0300 SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

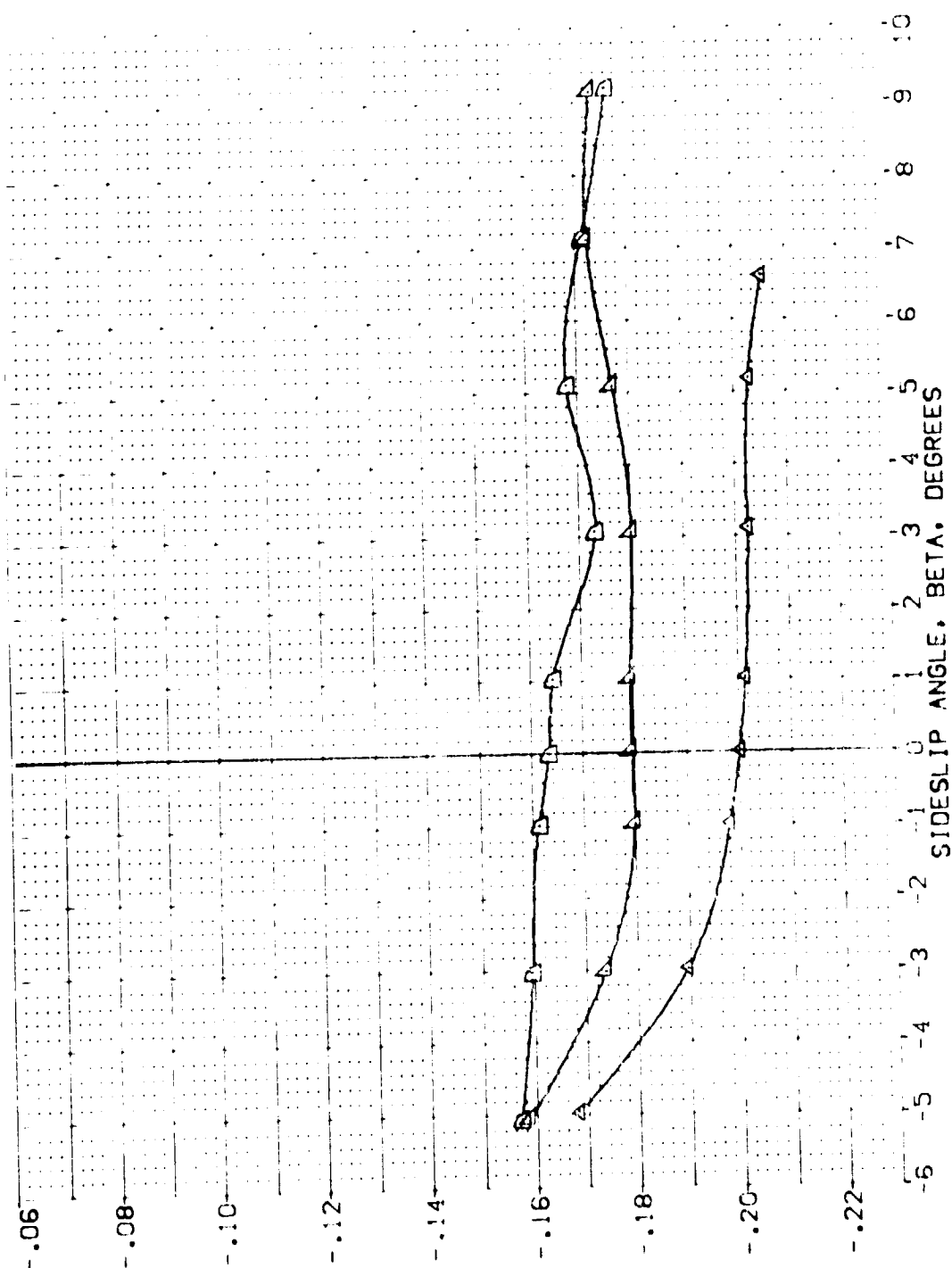


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MACP = 1.05

DATA SET SYMBOL  
[Y4058]  
[Y4059]  
[Y4060]  
[Y4061]  
[Y4062]  
[Y4063]

CONFIGURATION DESCRIPTION  
ARC 11-747 D453A B C M F V1 V  
DATA NOT AVAILABLE  
ARC 11-747 D453A B C M F V1 V  
ARC 11-747 D453A B C M F V1 V  
ARC 11-747 D453A B C M F V1 V  
ARC 11-747 D453A B C M F V1 V

NO.1, RV/L  
NO.1, RV/L  
NO.1, RV/L  
NO.1, RV/L  
NO.1, RV/L

ALPHA  
10.000  
20.000  
10.000  
20.000

RUDDER  
-25.000  
-25.000  
-25.000  
-25.000

SPDRBK  
25.000  
25.000  
25.000  
25.000

BDF LAP  
-11.700  
-11.700  
-11.700  
-11.700

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP 11.7500 IN.  
ZMRP 11.7500 IN.  
SCALE 10300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

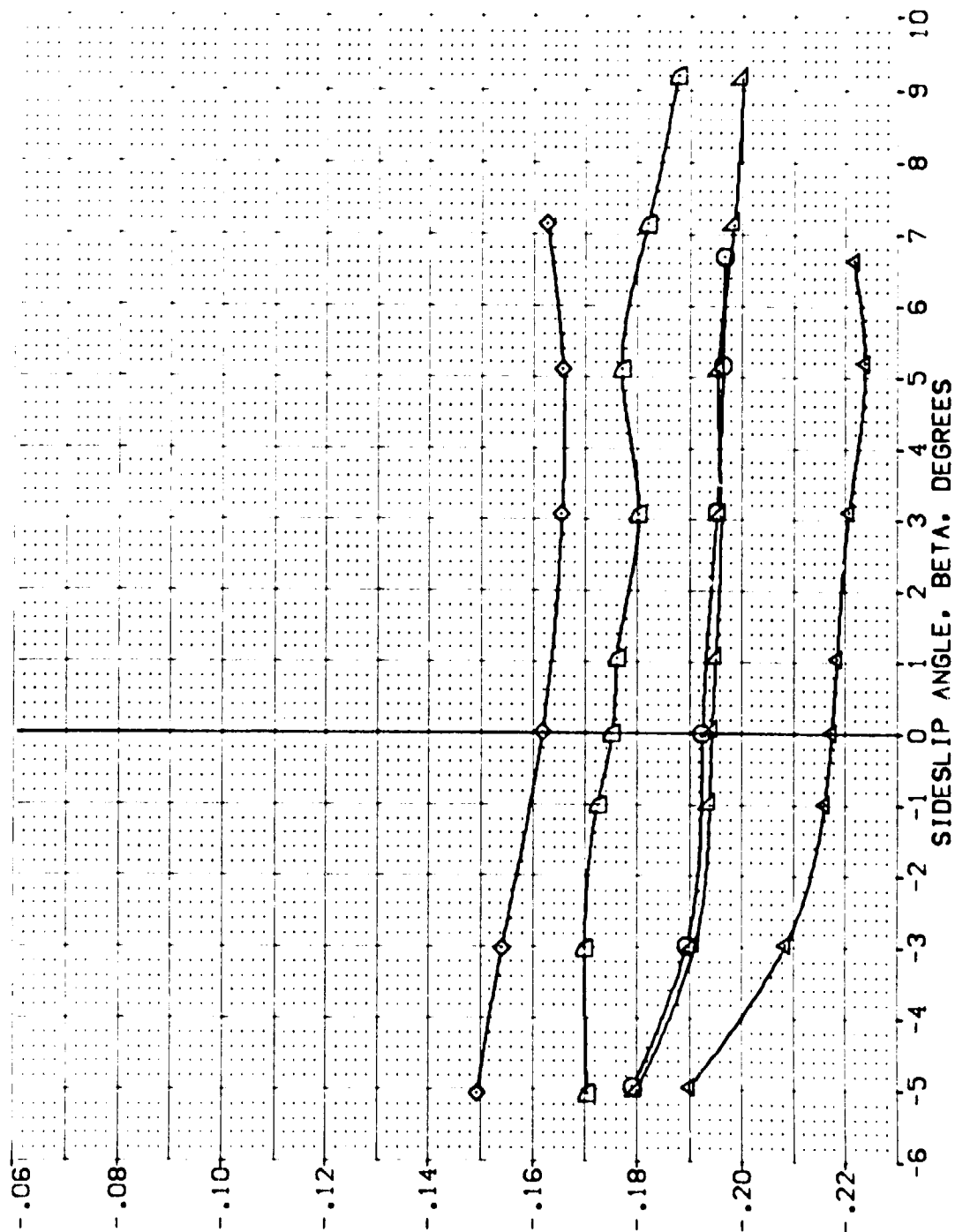


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

CEJMAC-H = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION:
[YEJ058]	ARC 11-747 D453A B C M F V I V	0.000	-25.000	-11.700	25.000	SREF 2.4210 50.1 FT.
[YEJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
[YEJ060]	ARC 11-747 D453A B C M F V I V	20.000	-25.000	-11.700	25.000	BREF 28.1004
[YEJ061]	ARC 11-747 D453A B C M F V I V	10.000	-25.000	-11.700	55.000	YMRP 32.3010
[YEJ062]	ARC 11-747 D453A B C M F V I V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500
[YEJ063]	ARC 11-747 D453A B C M F V I V	20.000	-25.000	-11.700	55.000	SCALE 11.3300

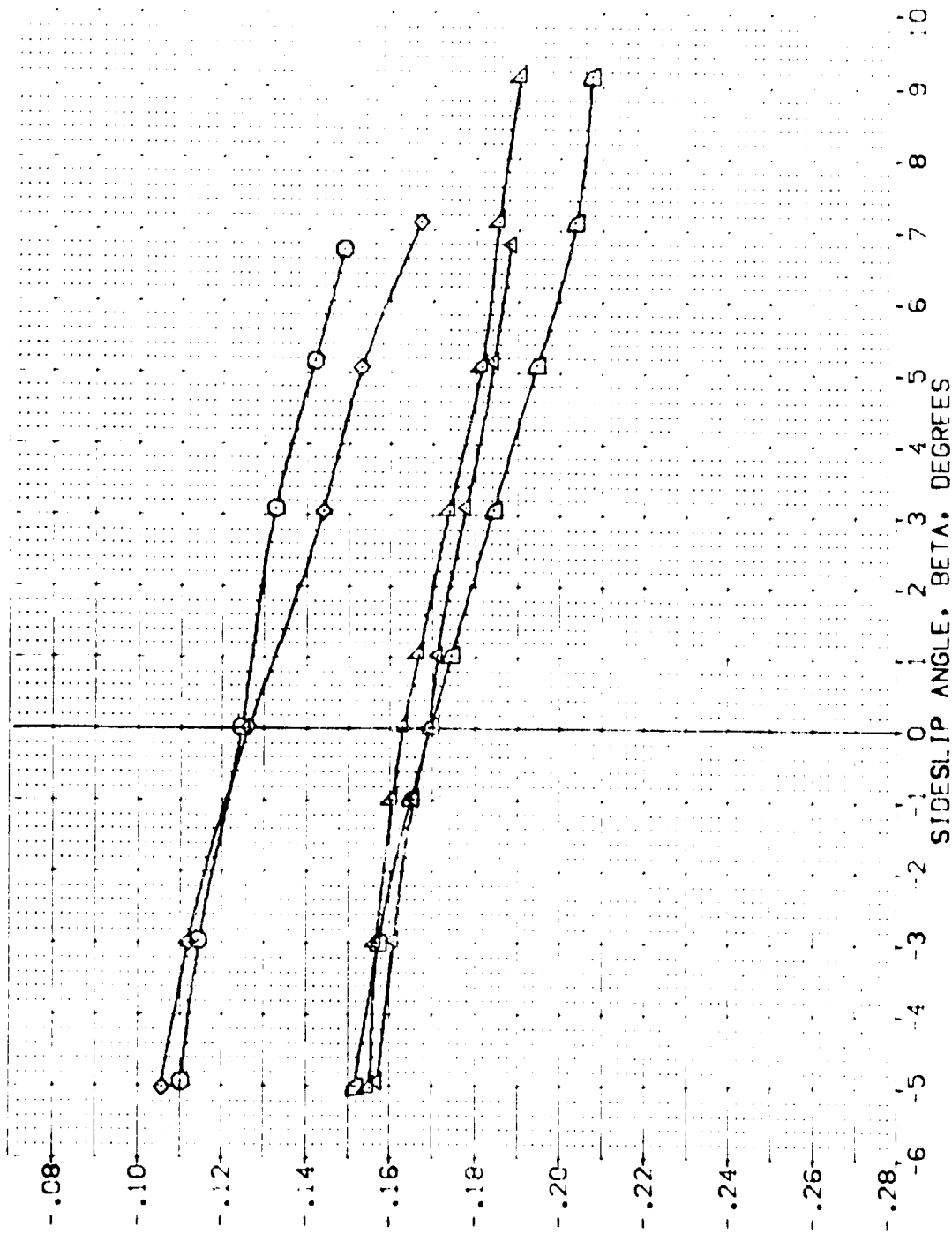


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(A)MACH = .60



DATA SET: SYMB. CONFIGURATION DESCRIPTION

DATA SET	SYMB.	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YEJ058]	C	DATA NOT AVAILABLE	0.00	-25.000	-11.700	75.000	SREF 2.4210 SQ.FT.
[YEJ059]	C	DATA NOT AVAILABLE	10.000	-25.000	-11.700	75.000	BREF 14.2443 IN.
[YEJ060]	C	DATA NOT AVAILABLE	20.000	-25.000	-11.700	75.000	BREF 28.1004 IN.
[YEJ051]	APC	-747 CA53A B C H F 1	10.000	-25.000	-11.700	55.000	XREF 32.3010 IN.
[YEJ052]	APC	-747 CA53A B C H F 2	10.000	-25.000	-11.700	55.000	YREF 11.2500 IN.
[YEJ053]	APC	-747 CA53A B C H F 3	20.000	-25.000	-11.700	55.000	ZREF 11.2500 IN.

LOWER RIGHT SPEED BRAKE HINGE PANEL HINGE MOMENT COEFFICIENT, CHLR

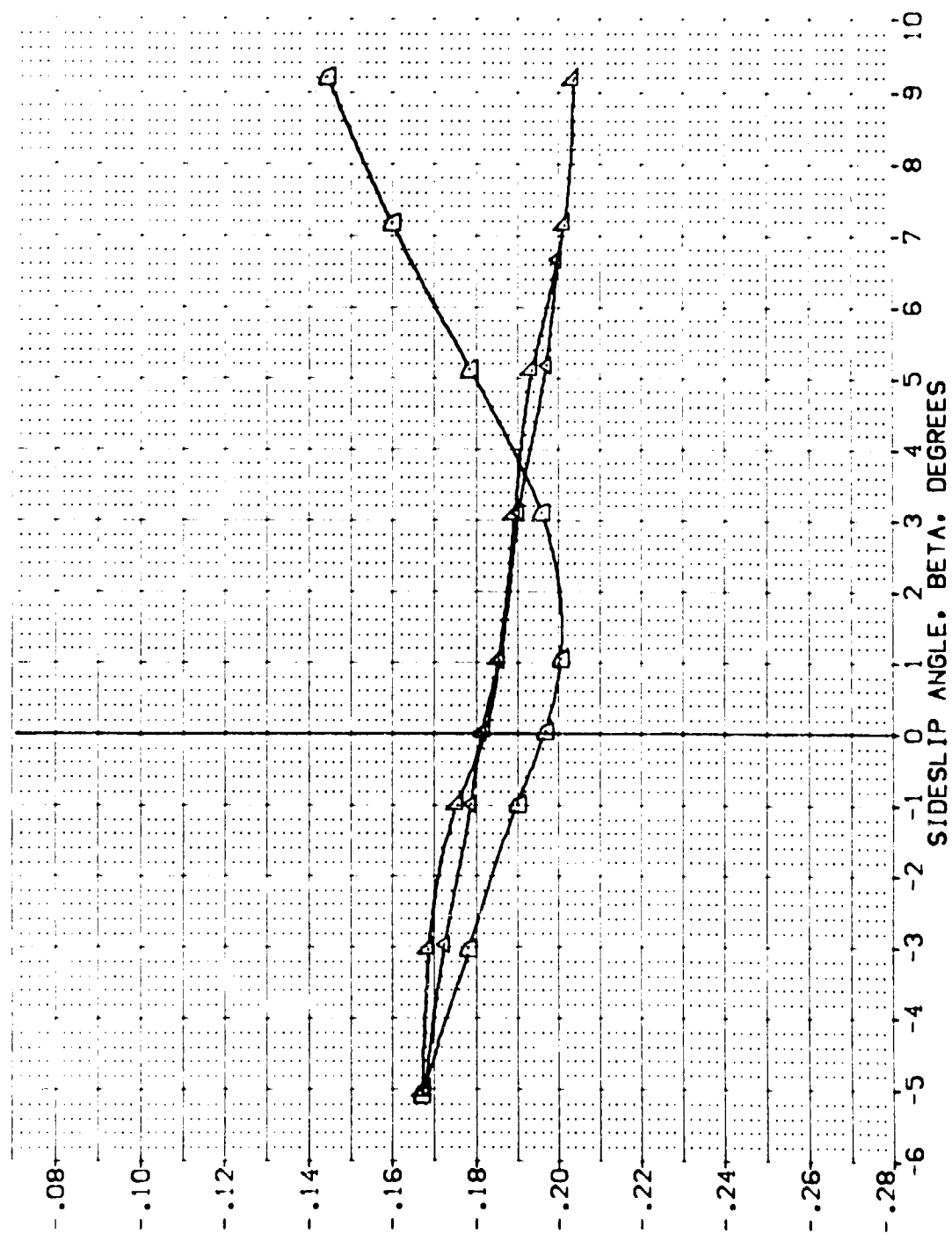


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPDRBK	REFERENCE INFORMATION
(YEJ058)	ARC 11-747 DA53A B C M F V1 V	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJ059)	ARC 11-747 DA53A B C M F V1 V	10.000	-25.000	-11.700	25.000	LREF 14.2440
(YEJ060)	ARC 11-747 DA53A B C M F V1 V	20.000	-25.000	-11.700	25.000	BREF 28.1004
(YEJ061)	ARC 11-747 DA53A B C M F V1 V	10.000	-25.000	-11.700	55.000	XMRP 32.3010
(YEJ062)	ARC 11-747 DA53A B C M F V1 V	20.000	-25.000	-11.700	55.000	YMRP 11.2500
(YEJ063)	ARC 11-747 DA53A B C M F V1 V	20.000	-25.000	-11.700	55.000	ZMRP 11.2500 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

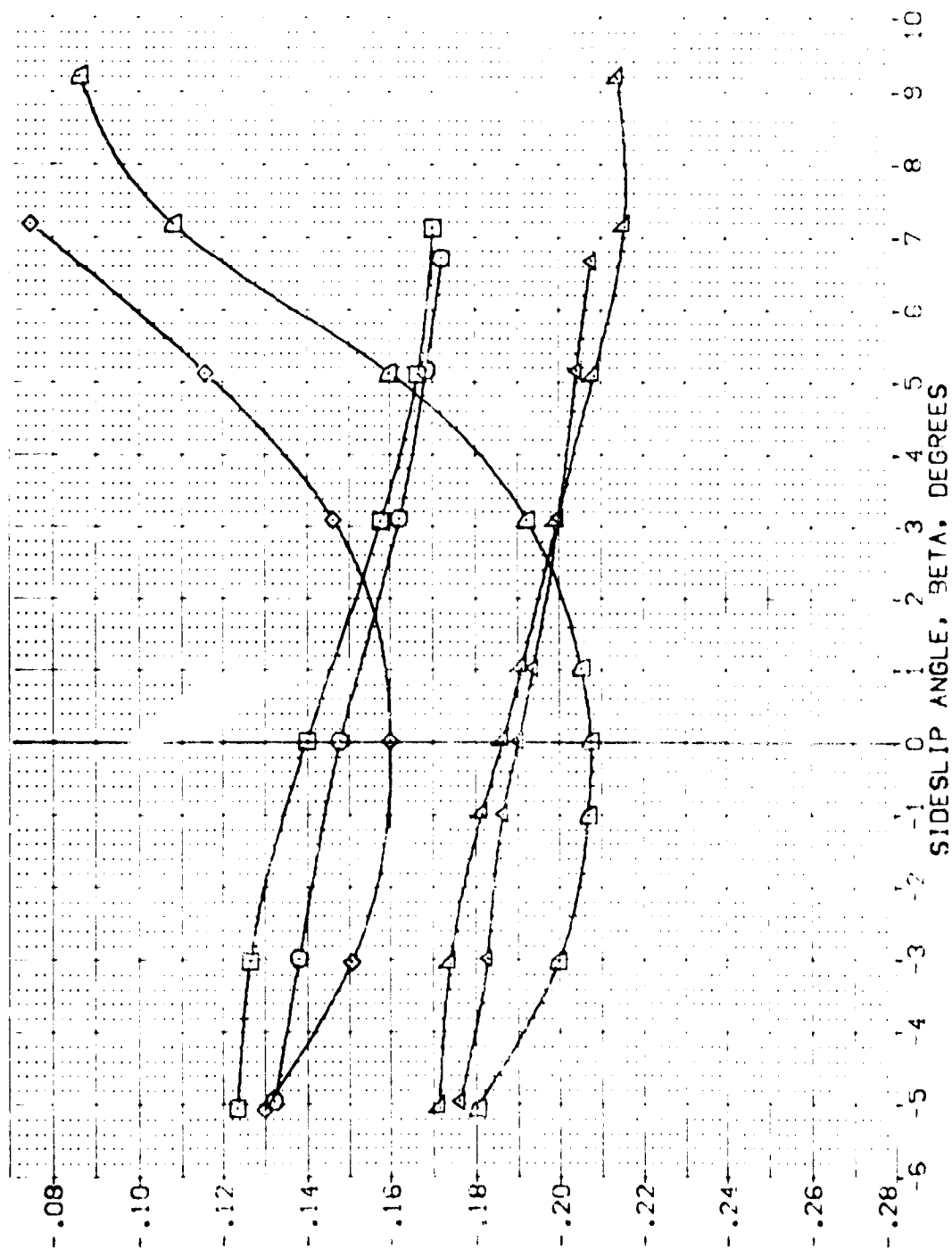


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MAC = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [VEJ058] DATA NOT AVAILABLE  
 [VEJ059] DATA NOT AVAILABLE  
 [VEJ060] DATA NOT AVAILABLE  
 [VEJ061] DATA NOT AVAILABLE  
 [VEJ062] DATA NOT AVAILABLE  
 [VEJ063] DATA NOT AVAILABLE

ARC 11-747 D453A B C H F V V NOT RUL  
 ARC 11-747 D453A B C H F V V NOT RUL  
 ARC 11-747 D453A B C H F V V NOT RUL

ALPHA RUDDER BOFLAP SPOBRK  
 0.000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 25.000  
 20.000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 25.000  
 20.000 -25.000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.7440  
 BREF 28.1004  
 YREF 32.3010  
 ZREF 11.2500  
 SCALE .5300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

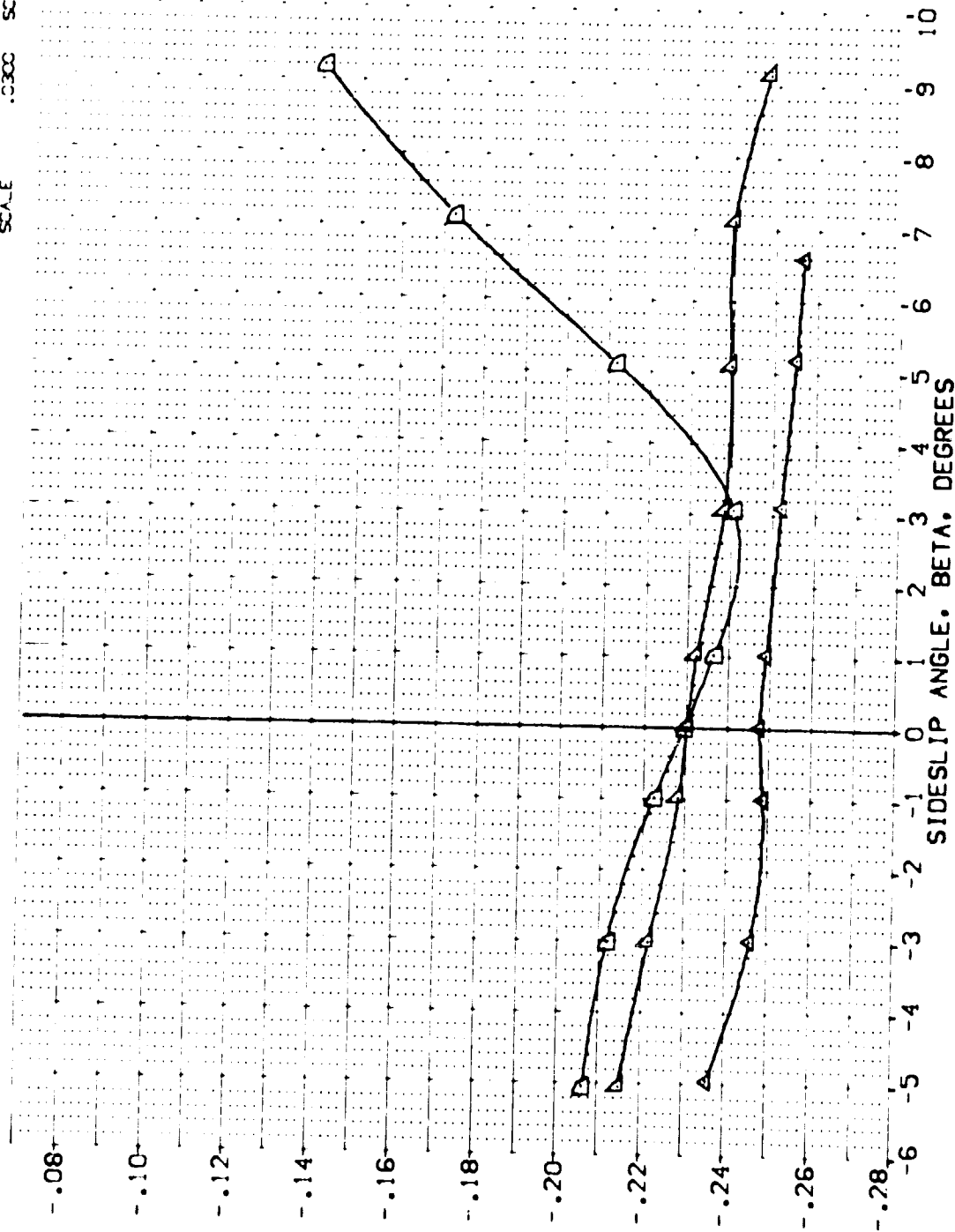


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(C)MAC = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPDBRK	REFERENCE INFORMATION
[VEJ058]	ARC 11-747 DA53A B C H F VI V	0.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ059]	DATA NOT AVAILABLE	10.000	-25.000	-11.700	25.000	LREF 14.2440
[VEJ060]	ARC 11-747 DA53A B C H F VI V	20.000	-25.000	-11.700	25.000	BREF 28.1004
[VEJ061]	ARC 11-747 DA53A B C H F VI V	10.000	-25.000	-11.700	55.000	XPRP 32.3010
[VEJ062]	ARC 11-747 DA53A B C H F VI V	10.000	-25.000	-11.700	55.000	YPRP 11.0000
[VEJ063]	ARC 11-747 DA53A B C H F VI V	20.000	-25.000	-11.700	55.000	ZPRP 11.2500
						SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT,  $C_{HRL}$

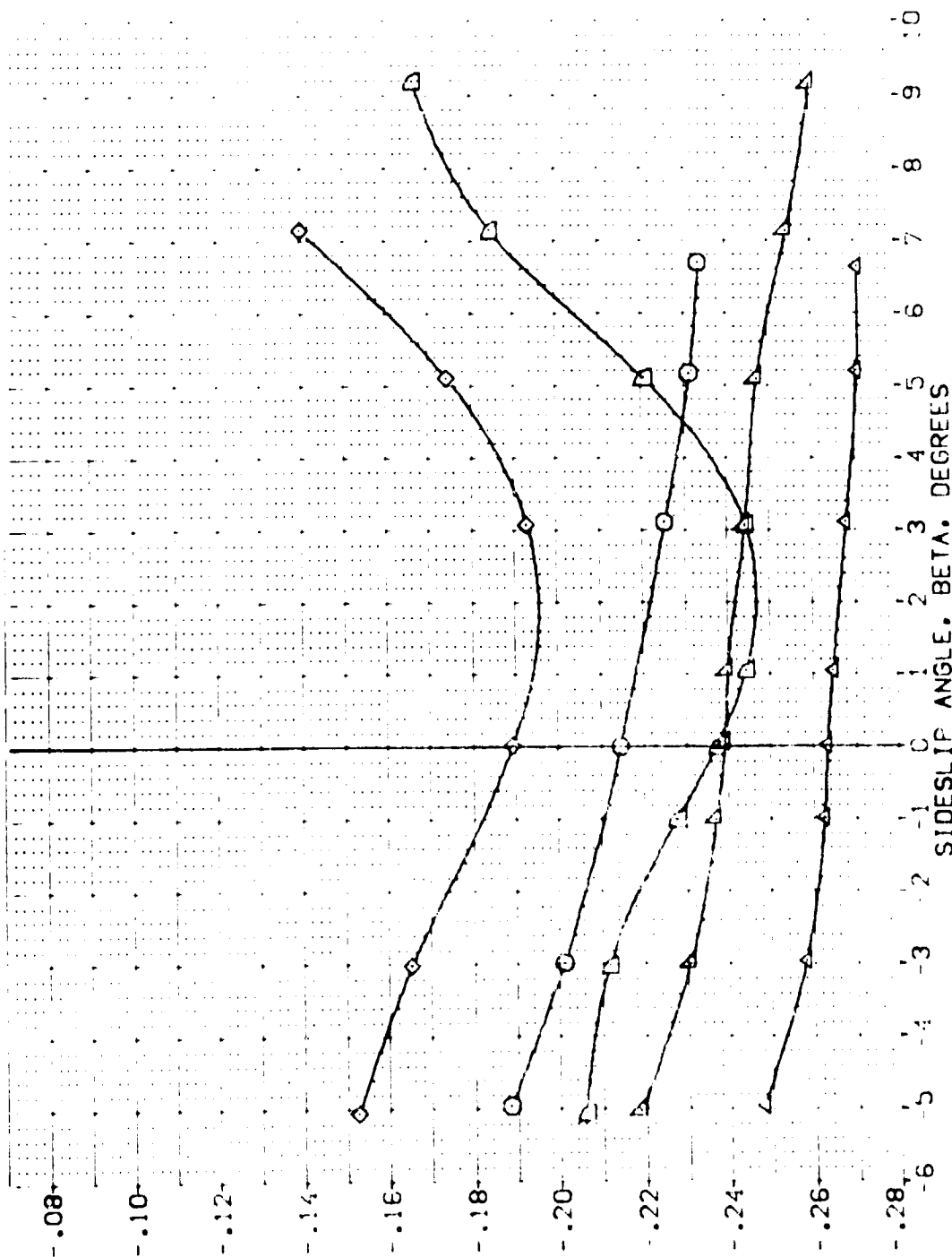


FIG. 34 RUDDER HINGE MOMENTS, -25. DEGREES RUDDER

(E)MAC = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BD/LAP	SPEEDBRK	REFERENCE INFORMATION
[VEJ011]	ARC 11-747 0A53A B C M F V1	.000	-11.700	25.000	SRF 2.4210 SQ.FT.
[VEJ024]	ARC 11-747 0A53A B C M F V1	.000	-11.700	55.000	SRF 14.2440
[VEJ038]	ARC 11-747 0A53A B C M F V1	.000	-11.700	85.000	SRF 28.0000
					AMPD 37.3010
					YMRD 0.0000
					ZMRD 11.2500
					SCALE 11.0000

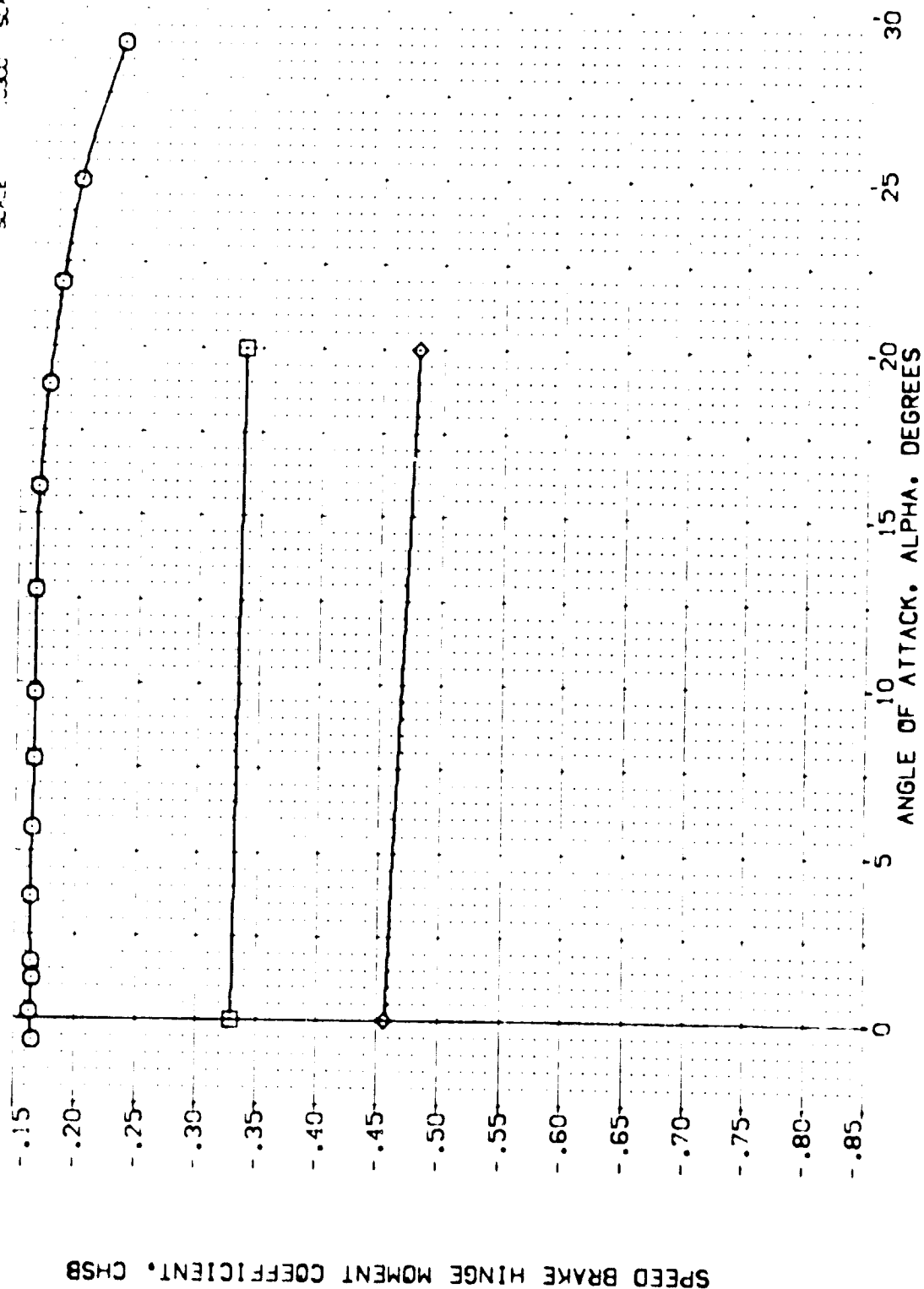


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(A)MAC = .60



DATA SET SYMBOL: Q  
(YES) 11  
(YES) 24  
(YES) 38

CONFIGURATION DESCRIPTION  
ARC 11-747 BAS3A B C M F VI V NOM. RWL  
DATA NOT AVAILABLE  
DATA NOT AVAILABLE

RUDER: .000  
RUDER: .000  
RUDER: .000

SPD BRK: 25.000  
SPD BRK: 55.000  
SPD BRK: 85.000

REFERENCE INFORMATION  
SREF: 2.4210 50.000  
BREF: 14.2440 100.000  
BREF: 28.1004 100.000  
XREF: 32.3010 100.000  
YREF: .0000 100.000  
ZREF: 11.2500 100.000  
SCALE: .0000 100.000

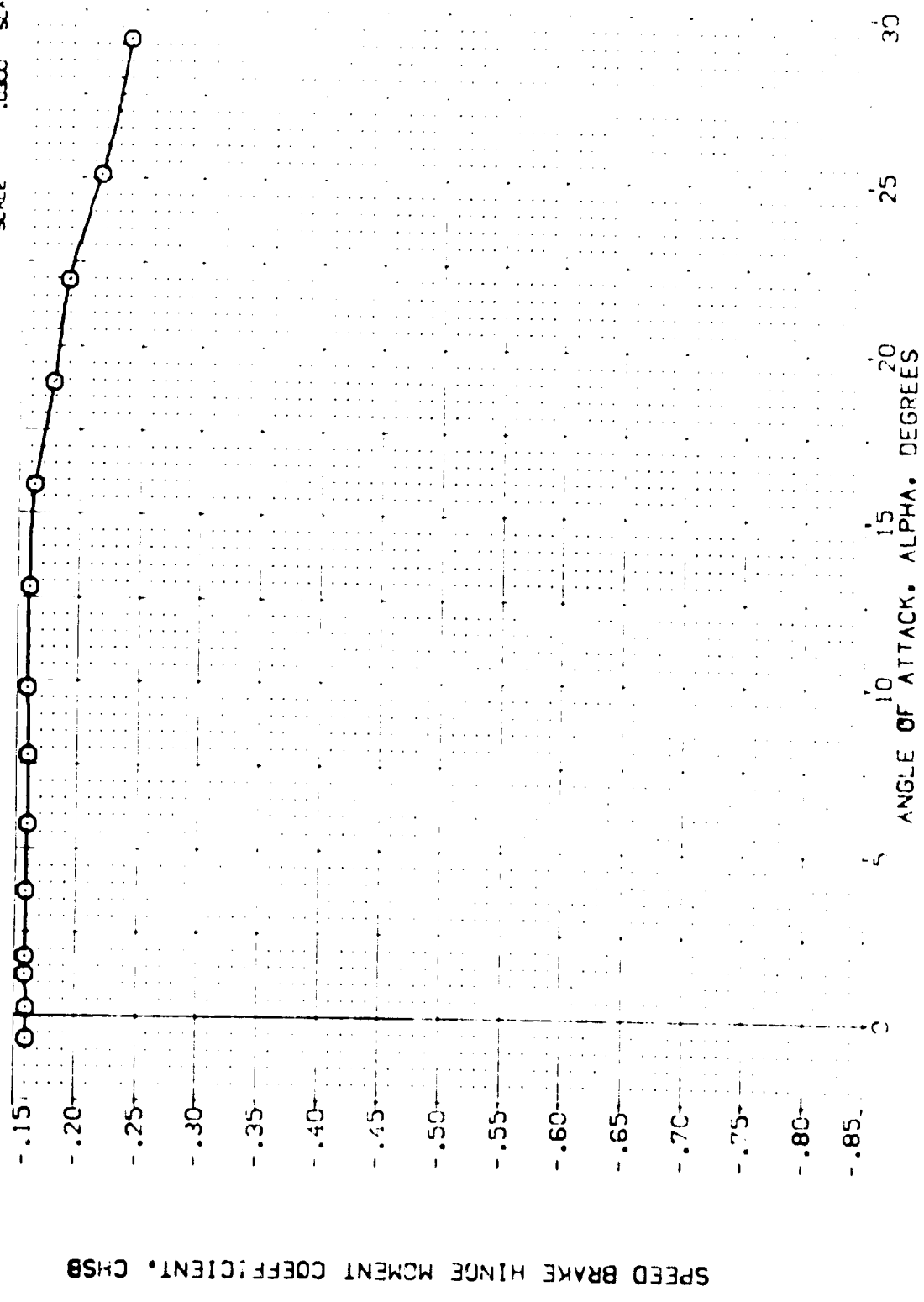
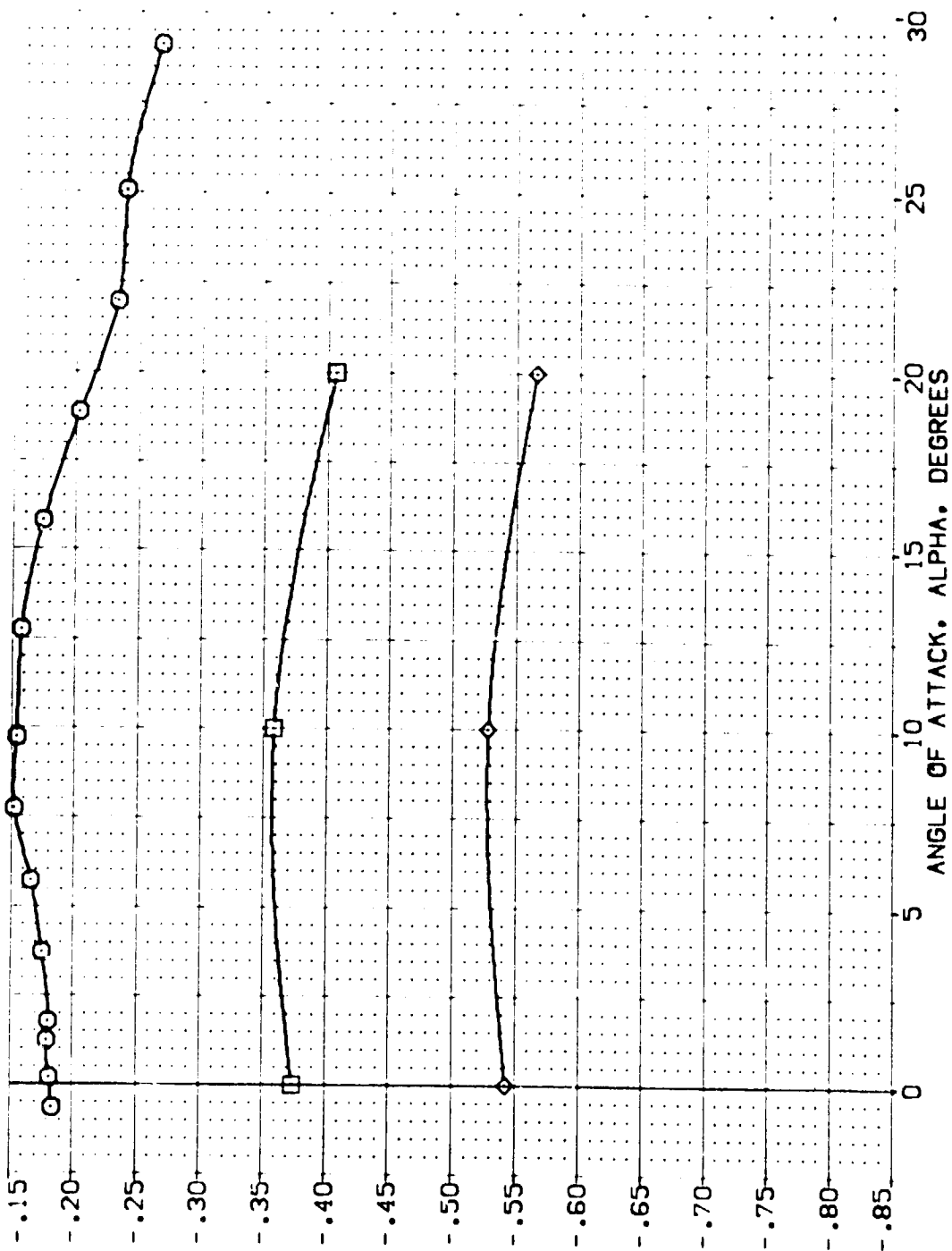


FIG. 35 SPEEDBRAKE HINGEMENT'S

(B) MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BD FLAP	SPODBRK	REFERENCE INFORMATION
[YE1011]	ARC    -747 DAS3A B C H F V   V NOT, RV/L	.000	11.700	25.000	SREF 2.4210 50. FT.
[YE1024]	ARC    -747 DAS3A B C H F V   V NOT, RV/L	.000	11.700	55.000	LREF 14.2440
[YE1038]	ARC    -747 DAS3A B C H F V   V NOT, RV/L	.000	11.700	85.000	BREF 28.1000
					YREF 32.3010
					ZREF 11.2500
					SCALE 0.000



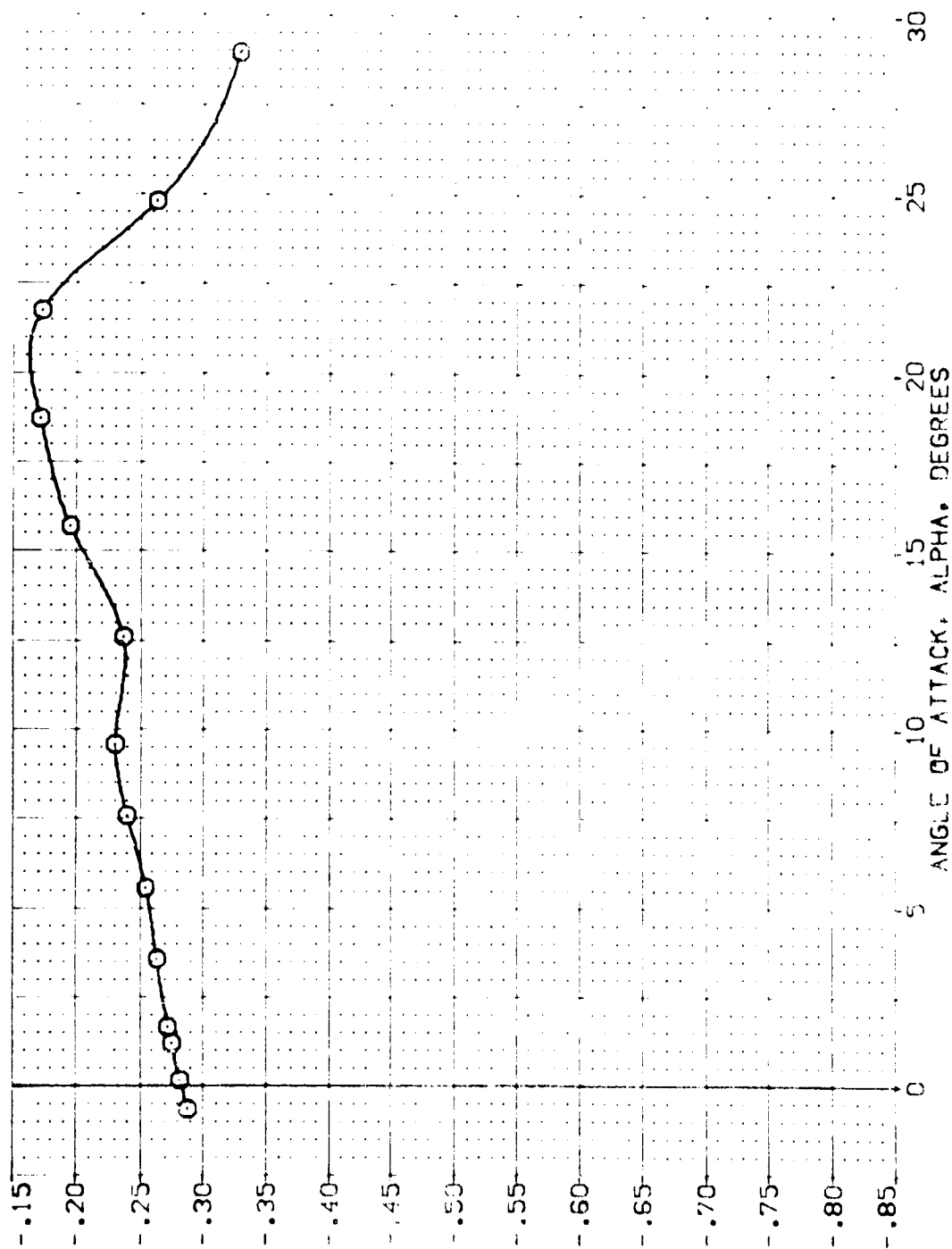
SPEED BRAKE HINGE MOMENT COEFFICIENT, CHSB

FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MACH = .90

DATA SET SYMBOL: (VEJ011)  
 (VEJ024)  
 (VEJ038)  
 CONFIGURATION DESCRIPTION: ARC 11-747 GAS3A B C M F VI V NOM. RV/L  
 DATA NOT AVAILABLE  
 DATA NOT AVAILABLE

RUDDER BDF LAP SPEEDK REFERENCE INFORMATION  
 .000 -11.700 25.000 SREF 2.4210 SQ. FT.  
 .000 -11.700 55.000 LREF 14.2440 IN.  
 .000 -11.700 85.000 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300 IN.



SPEED BRAKE HINGE MOMENT COEFFICIENT, CHSB

FIG. 35 SPEEDBRAKE HINGEMOMENTS

(D)MAC = 1.05





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
YES011	ARC 11-747 C/S3A B C M F V	.000	-11.700	75.000	SPR 2.4210 SQ.FT.
YES024	ARC 11-747 C/S3A B C M F V	.000	-11.700	50.000	SPR 14.2440
YES038	ARC 11-747 C/S3A B C M F V	.000	-11.700	65.000	SPR 28.0000
					SPR 32.3010
					SPR 11.0000
					SPR 11.2500
					SCALE 10.000

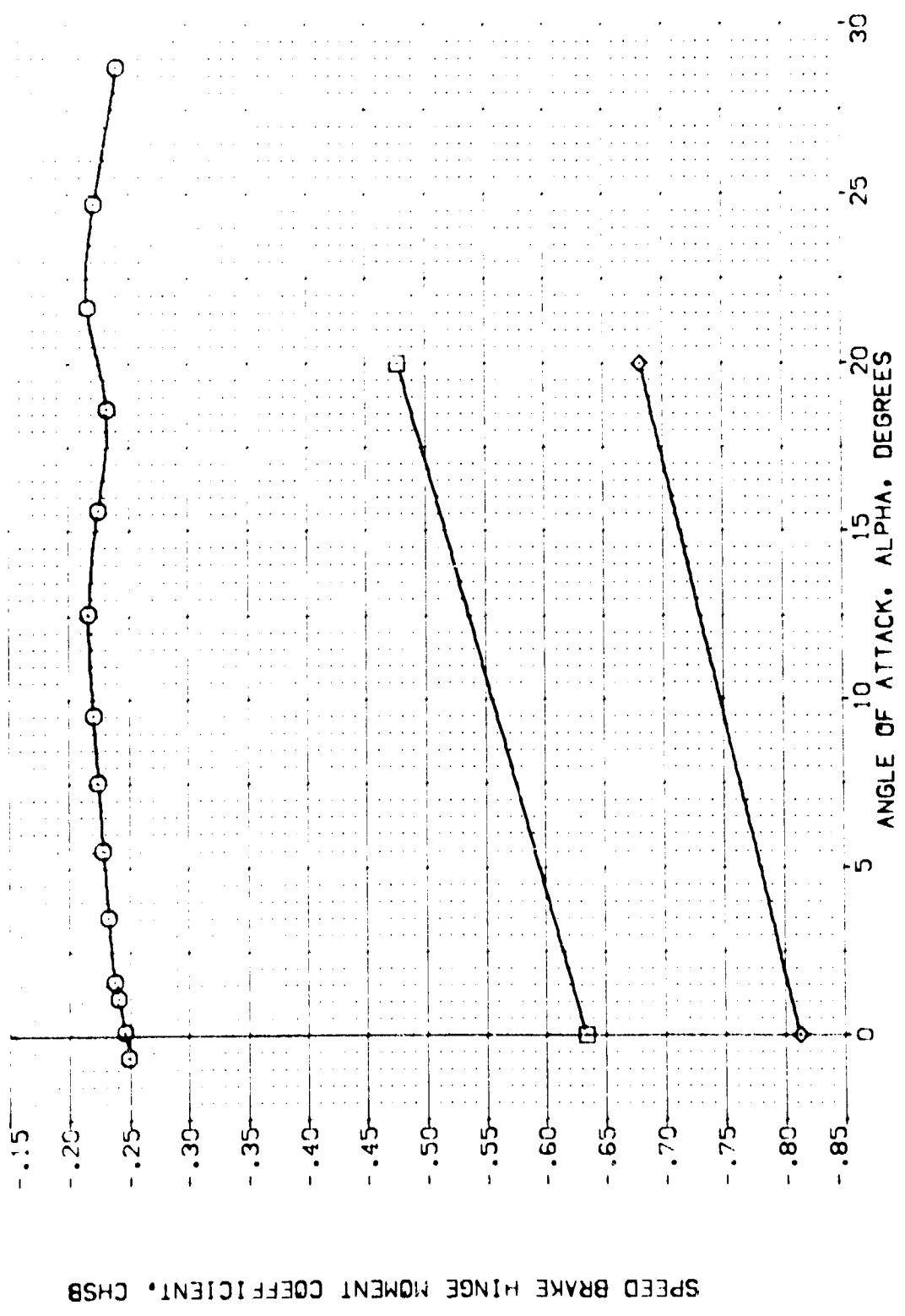


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(E)MAC = 1.20

DATA SET SYMBOL: (VEJ011) (VEJ024) (VEJ038)

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C H F VI V NON: RNVL  
 ARC 11-747 OAS3A B C H F VI V NON: RNVL  
 ARC 11-747 OAS3A B C H F VI V NON: RNVL

RUDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

SPEEDBRK: 25.000 55.000 85.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT.  
 LREF 14.2440 N.  
 BREF 28.1004 N.  
 XMRD 32.3010 N.  
 YMRD .0000 N.  
 ZMRD 11.2500 N.  
 SCALE .0300

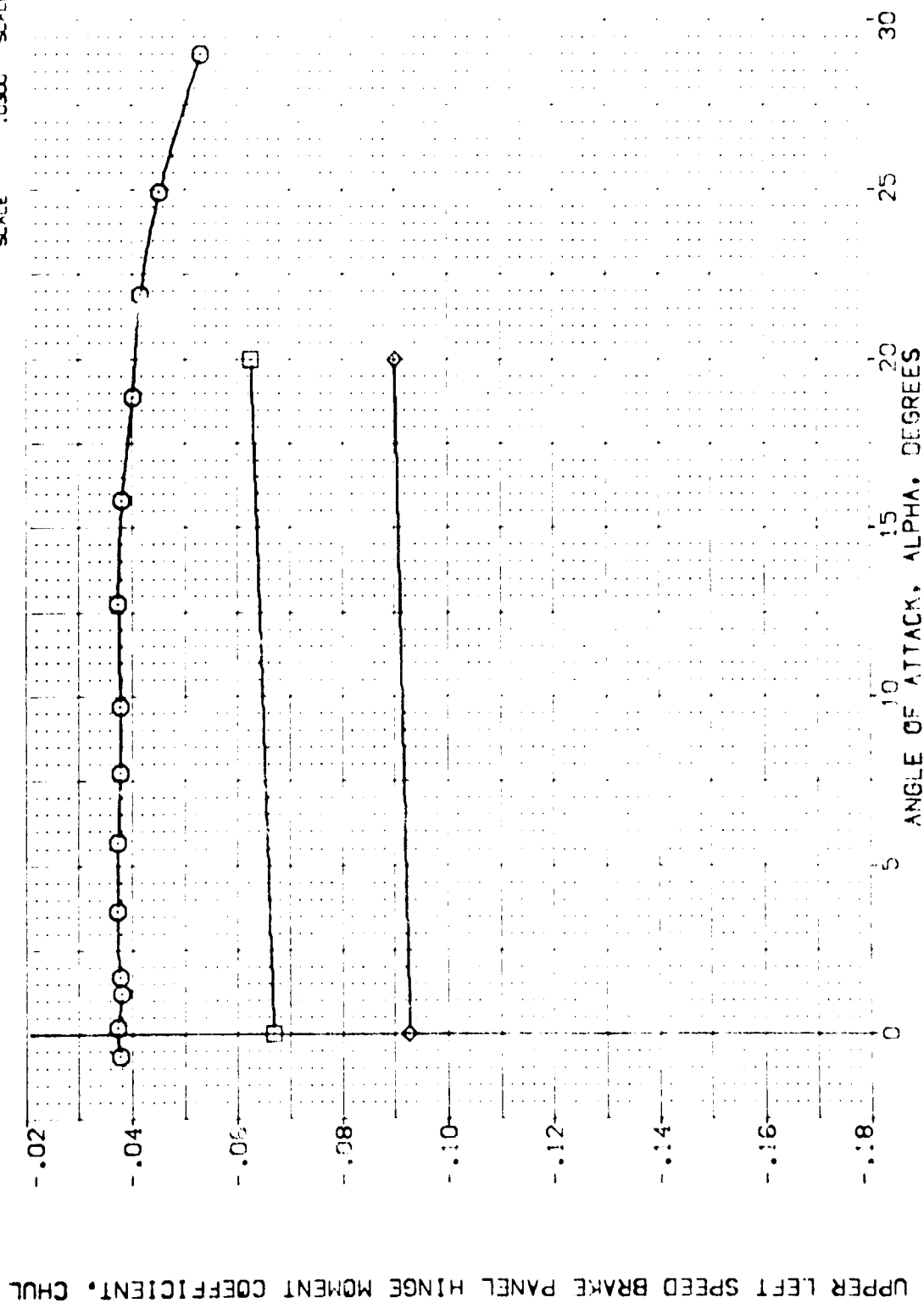


FIG. 35 SPEEDBRAKE HINGEMENTS

(A)MACH = .60

DATA SET SYMBOL. CONFIGURATION DESCRIPTION  
 (YFJ011) Q ARC 11-747 DASSA B C M F VI V NOM. RV/L  
 (YFJ024) DATA NOT AVAILABLE  
 (YFJ038) DATA NOT AVAILABLE

RUDER BOFLAP SPOBRK  
 .000 -11.700 25.000  
 .000 -11.700 55.000  
 .000 -11.700 85.000

REFERENCE INFORMATION:  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XM00 32.3010  
 YM00 0.000  
 ZM00 0.000  
 SCALE 11.2500  
 .0300 SCALE

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

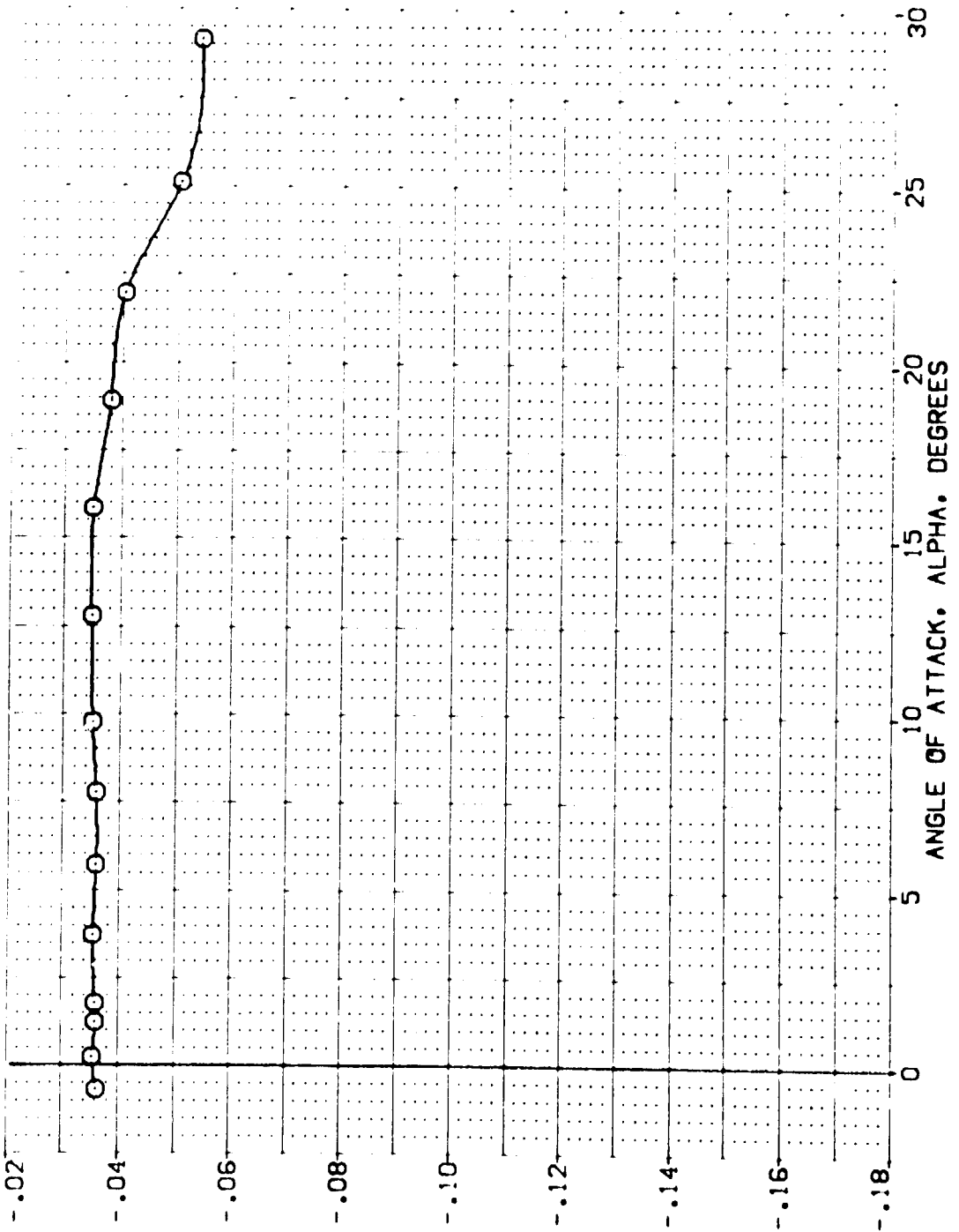


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[YEJ011]	ARC 11-747 OAS3A B C M F VI V	.000	-11.700	25.000	SREF 2.4210 SD.FT.
[YEJ024]	ARC 11-747 OAS3A B C M F VI V	.000	-11.700	55.000	LREF 14.2440
[YEJ038]	ARC 11-747 OAS3A B C M F VI V	.000	-11.700	85.000	BREF 28.1004
					XMRP 32.3010
					YMRP .0000
					ZMRP .0000
					SCALE 11.2500
					SCALE

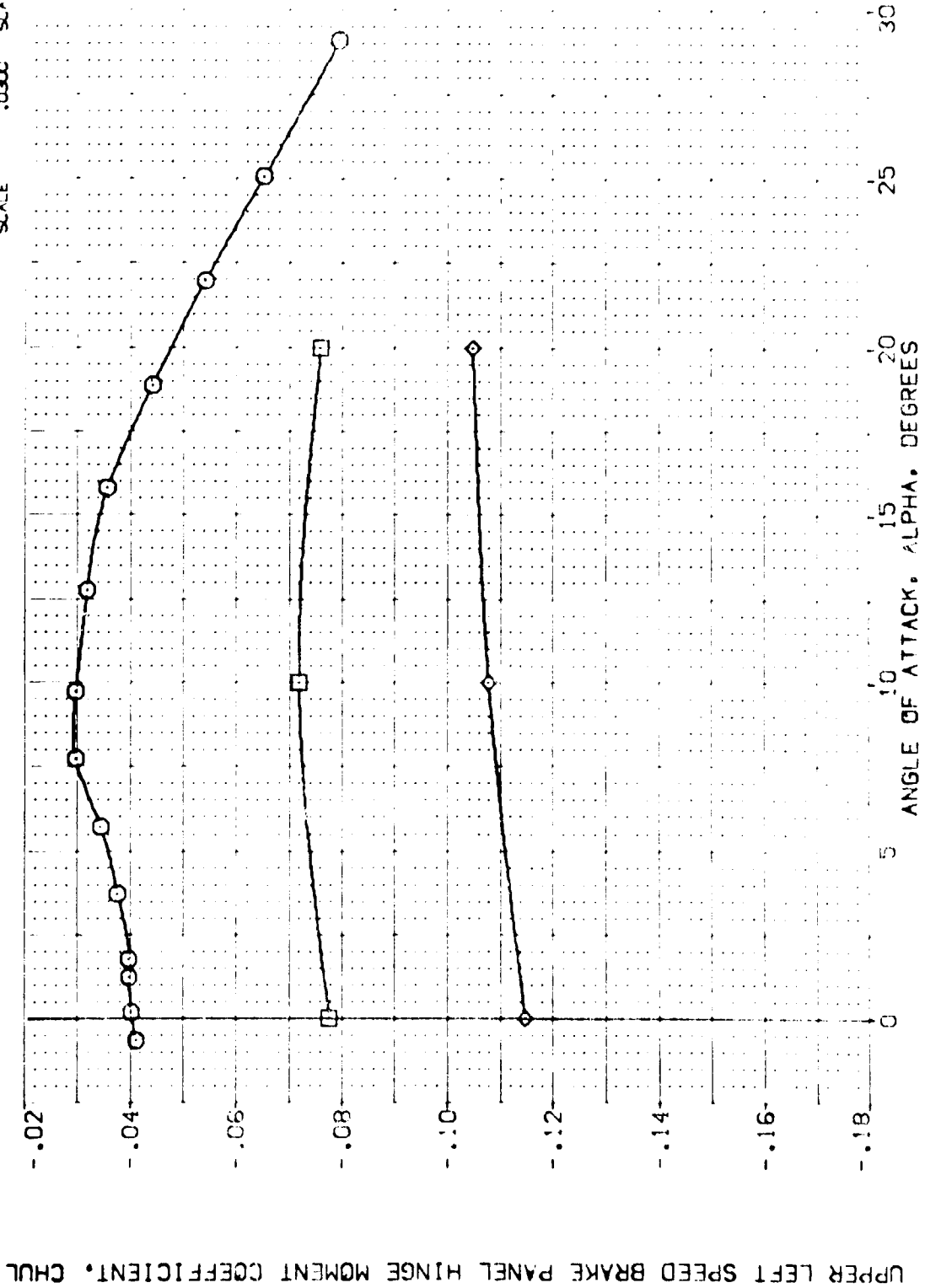


FIG. 35 SPEEDBRAKE HINGEMENTS

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
{VEJ011}	ARC 11-747 OAS3A B C M F VI V NOM. RV/L	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{VEJ024}	DATA NOT AVAILABLE	.000	-11.700	55.000	LREF 14.2440 IN.
{VEJ038}	DATA NOT AVAILABLE	.000	-11.700	85.000	BREF 28.1004 IN.
					XMRP 32.3010 IN.
					YMRP .0000 IN.
					ZMRP 11.2500 IN.
					SCALE .0300

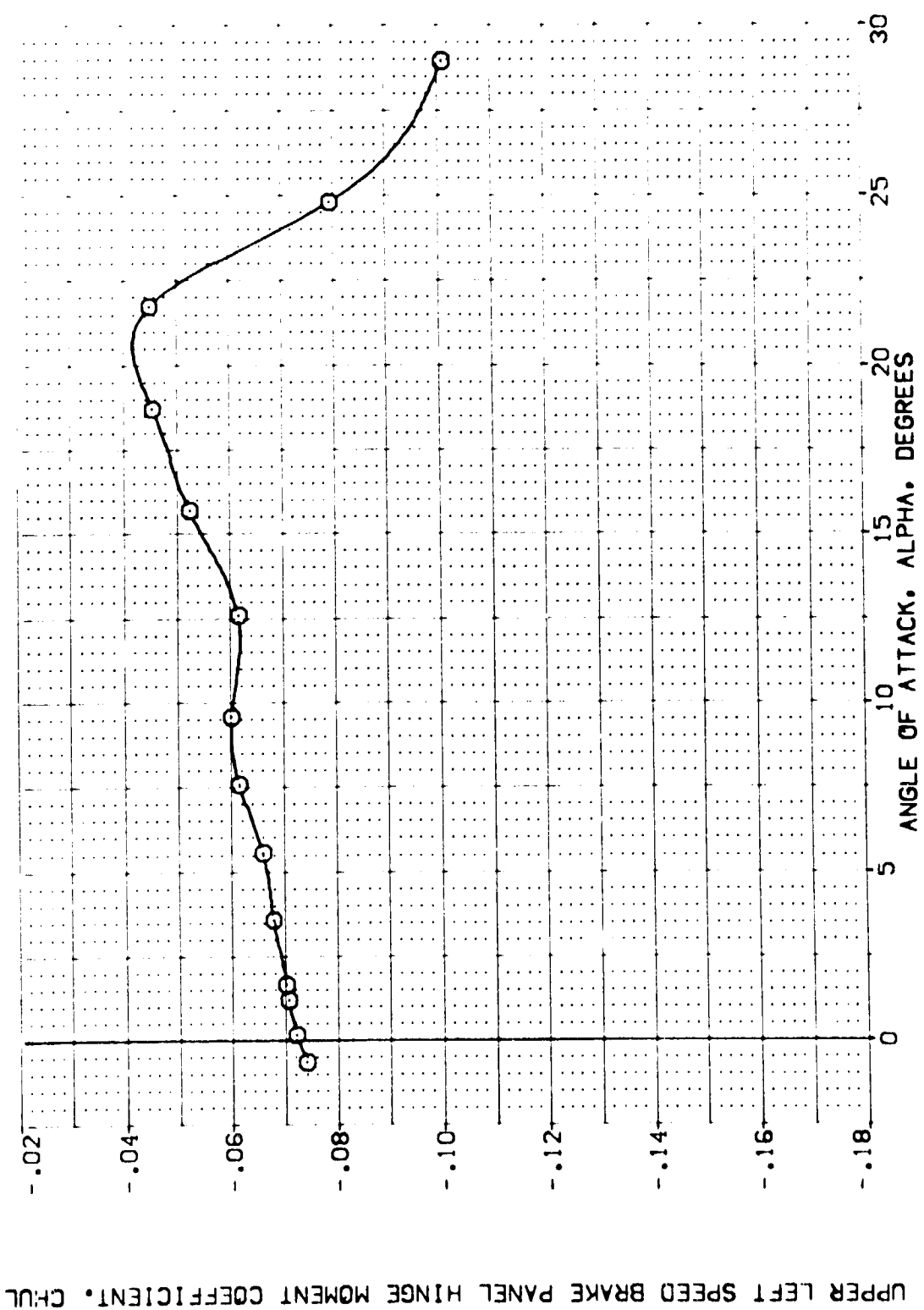


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(O)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[YEJ011] ARC 11-747 D453A B C M F VI V NOM. RV/L

[YEJ024] ARC 11-747 D453A B C M F VI V NOM. RV/L

[YEJ038] ARC 11-747 D453A B C M F VI V NOM. RV/L

RUDDER DEF LAP SPODBRK

.000 -11.700 75.000

.000 -11.700 55.000

.000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SQ. FT.

LREF 14.2410 IN.

BREF 28.1004 IN.

XMRP 32.3010 IN.

YMRP .0000 IN.

ZMRP 11.2500 IN.

SCALE .0300

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

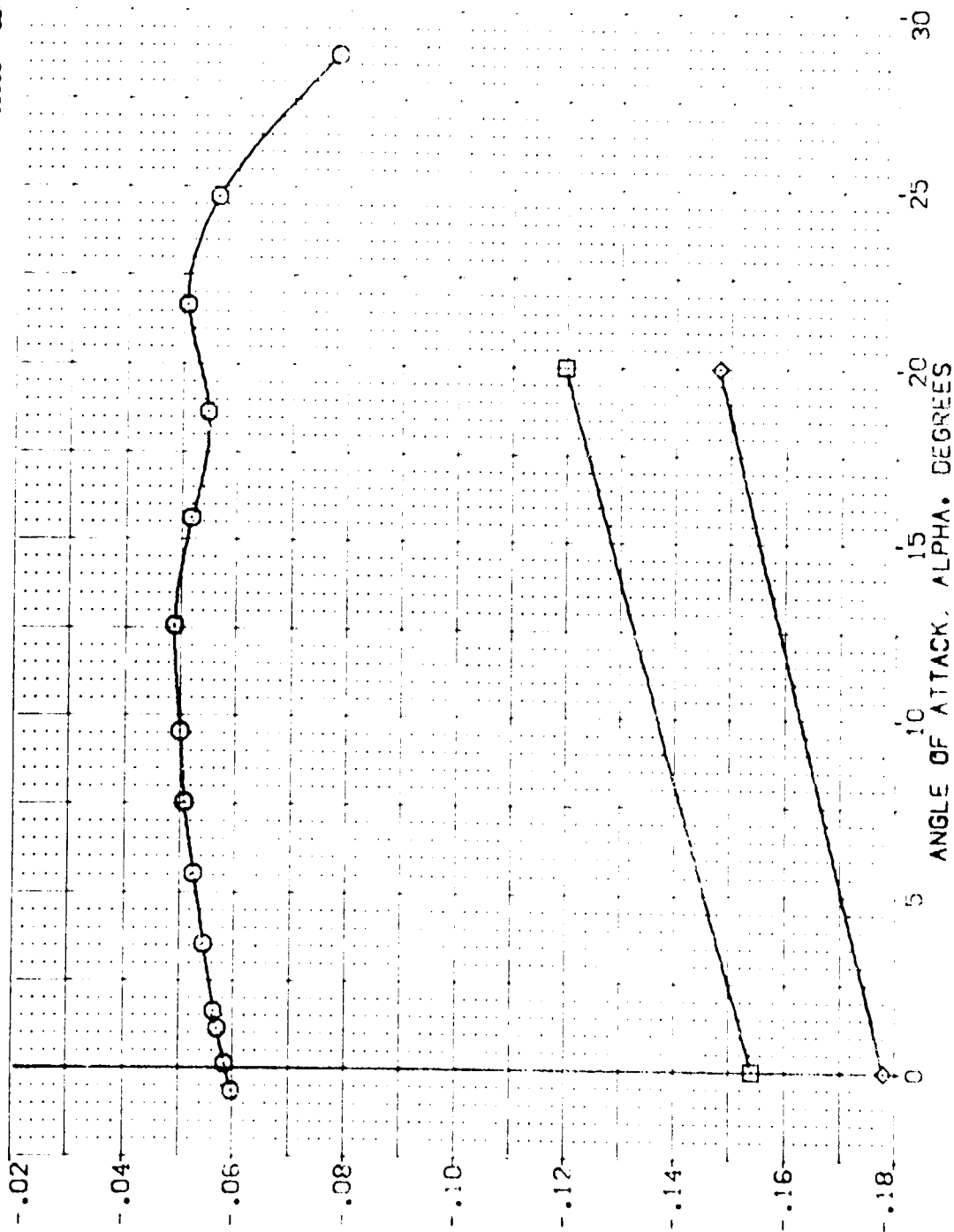


FIG. 35 SPEEDBRAKE HINGEMENTS

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BOG LAP	SPEED	REFERENCE INFORMATION
[VEJ011]	ARC 11-747 CAS3A B C M F VI V	.000	-11.700	25.000	2.4210 SQ.FT.
[VEJ024]	ARC 11-747 CAS3A B C M F VI V	.000	-11.700	55.000	14.2440
[VEJ030]	ARC 11-747 CAS3A B C M F VI V	.000	-11.700	85.000	28.1004
					32.3010
					11.0000
					11.2500
					.0300 SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

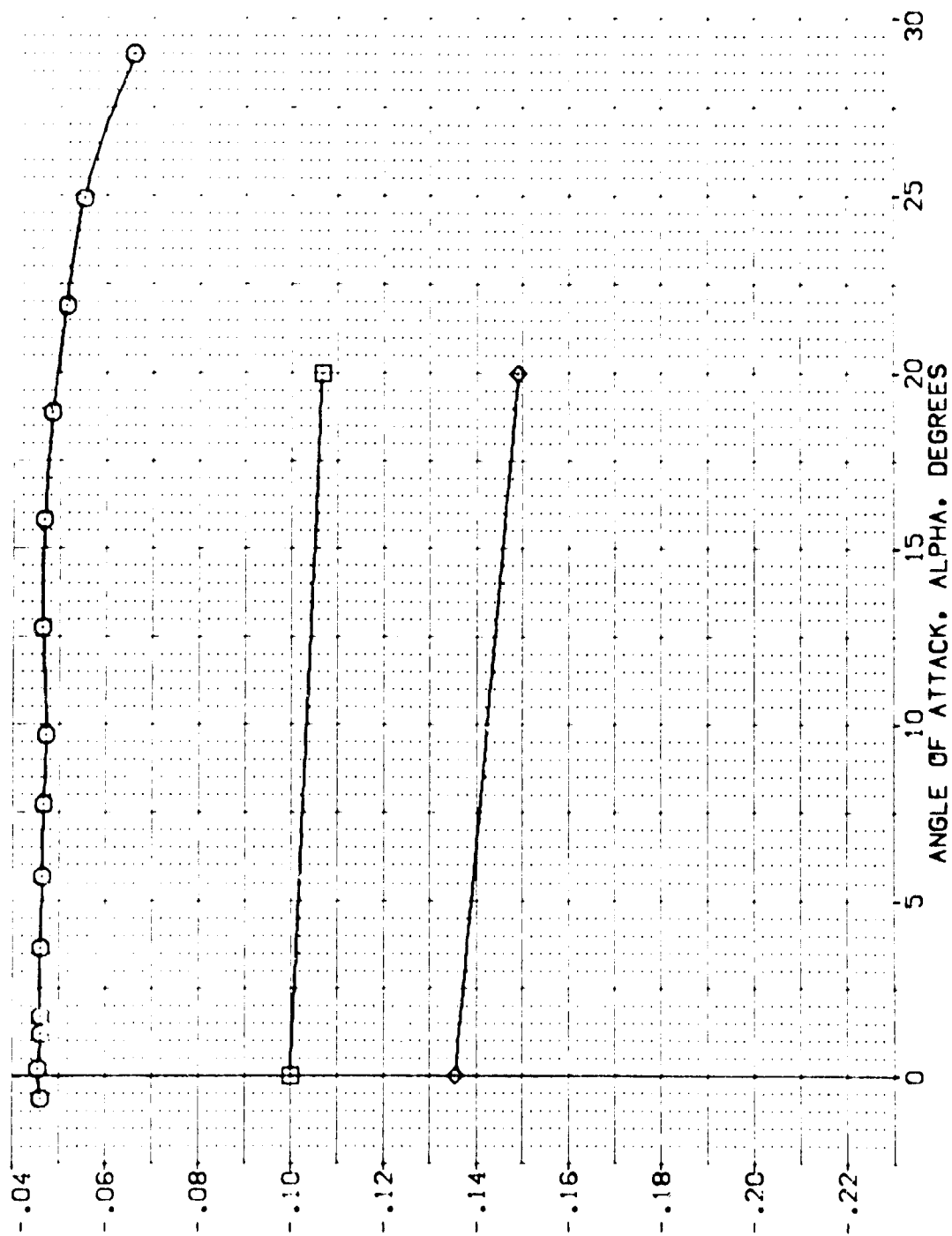


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(A)MACH = .60

DATA SET SYMBOL: (VEJ011) ARC 11-747 OAS3A B C H F VI V NMH. RWL  
 (VEJ024) DATA NOT AVAILABLE  
 (VEJ038) DATA NOT AVAILABLE

CONFIGURATION DESCRIPTION

RUDDER: .000  
 .000  
 .000

BOFLAP: -11.700  
 -11.700  
 -11.700

SPEED: 25.000  
 55.000  
 85.000

REFERENCE INFORMATION

SREF: 2.4210 SQ. FT.  
 LREF: 14.2440  
 BREF: 28.1004  
 XREF: 32.3010  
 YREF: .0000  
 ZREF: 11.2500  
 SCALE: .0300

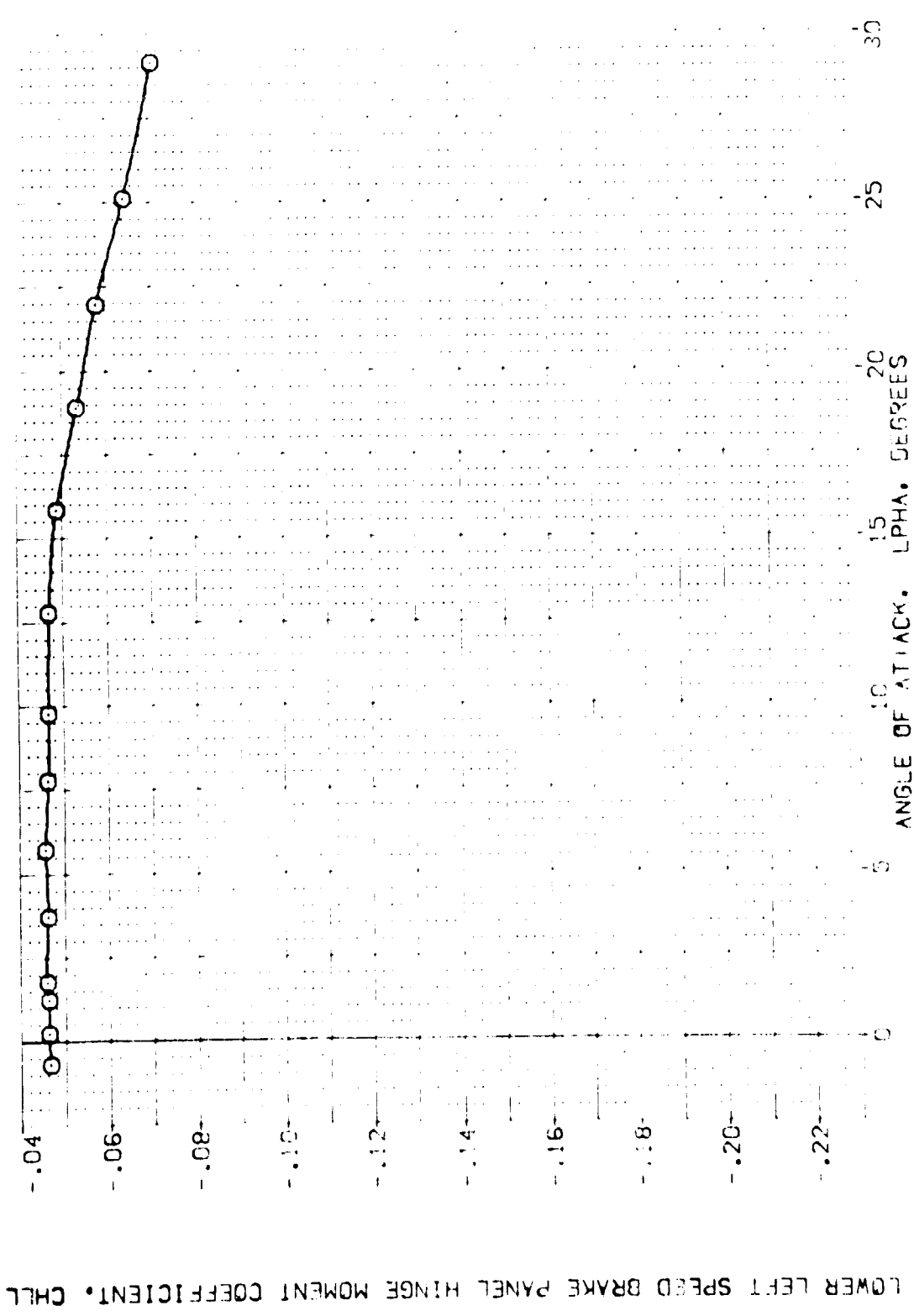


FIG. 35 SPEEDBRAKE HINGEMENTS

(B)MAC = .8C



DATA SET SYMBOL    CONFIGURATION DESCRIPTION    RUDDER    BFLAP    SPEED    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BFLAP	SPEED	REFERENCE INFORMATION
(VEJ011)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	25.000	SREF 2.4210 SQFT
(VEJ024)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	55.000	LREF 14.2440
(VEJ038)	ARC 11-747 BA53A B C M F V1 V	.000	-11.700	85.000	BREF 28.1004
					XREF 32.3010
					YREF .0000
					ZREF 11.2500
					SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

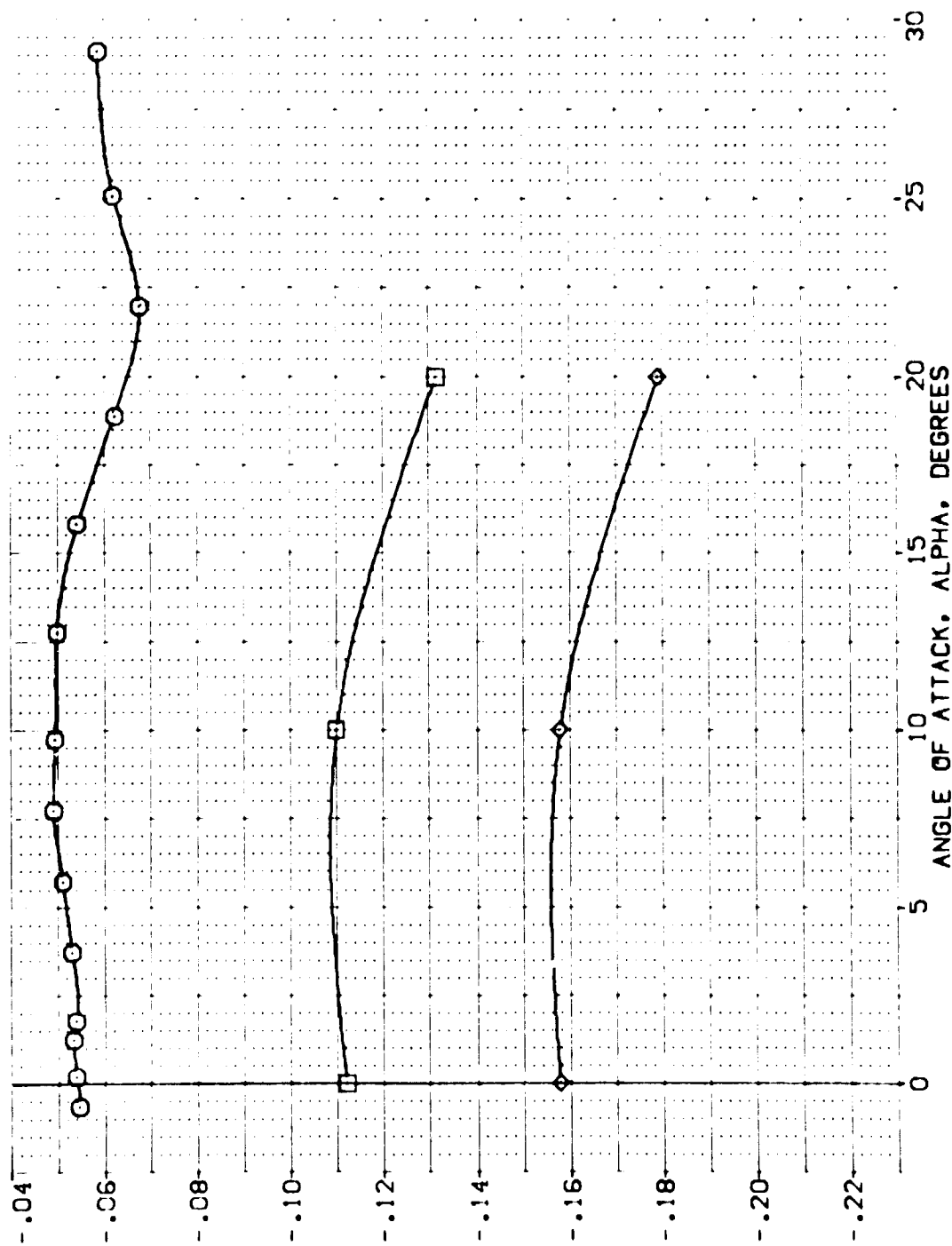


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MAC = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (YES/NO) Q ARC 111-747 OAS3A B C M F VI V NON. RWL  
 (YES/NO) DATA NOT AVAILABLE  
 (YES/NO) DATA NOT AVAILABLE

RUDER BOFLAP SPEEDBRK  
 .000 -11.700 25.000  
 .000 -11.700 35.000  
 .000 -11.700 65.000  
 REFERENCE INFORMATION  
 SPREF 2.4210 SQ.FT.  
 LRREF 14.2440 IN.  
 BRREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300 SCALE

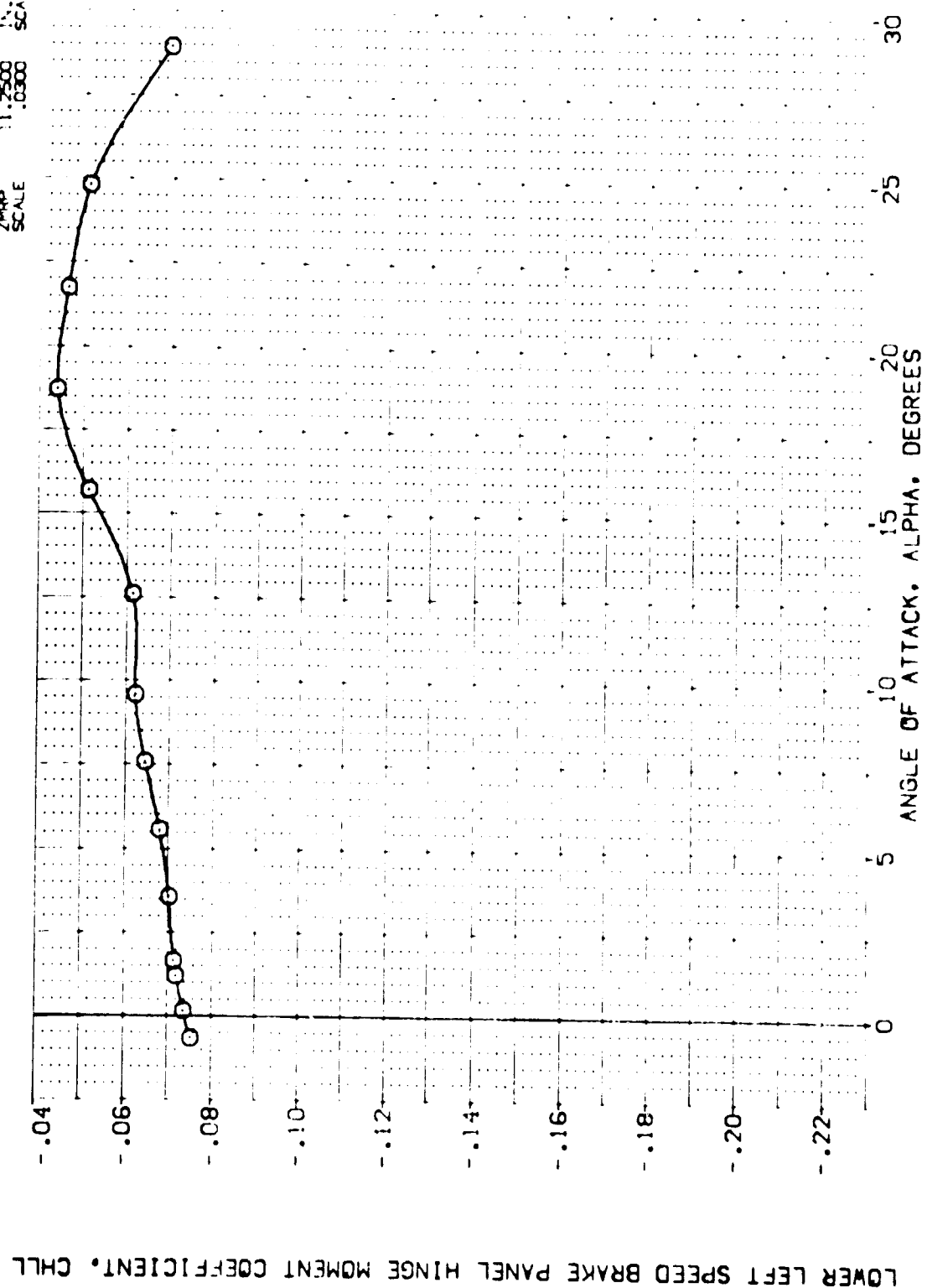


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MAC = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    RUDDER    BOFLAP    SPEEDBRK    REFERENCE INFORMATION

(VEJ011)	ARC 11 747 BA53A B C M F VI V	.000	-11.700	25.000	SREF 2.4210
(VEJ024)	ARC 11 747 BA53A B C M F VI V	.000	-11.700	55.000	LOEF 14.2440
(VEJ038)	ARC 11 747 BA53A B C M F VI V	.000	-11.700	85.000	BRKF 28.1004
					YUDD 32.3010
					YUDD 11.2500
					SCALE 11.0300
					SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

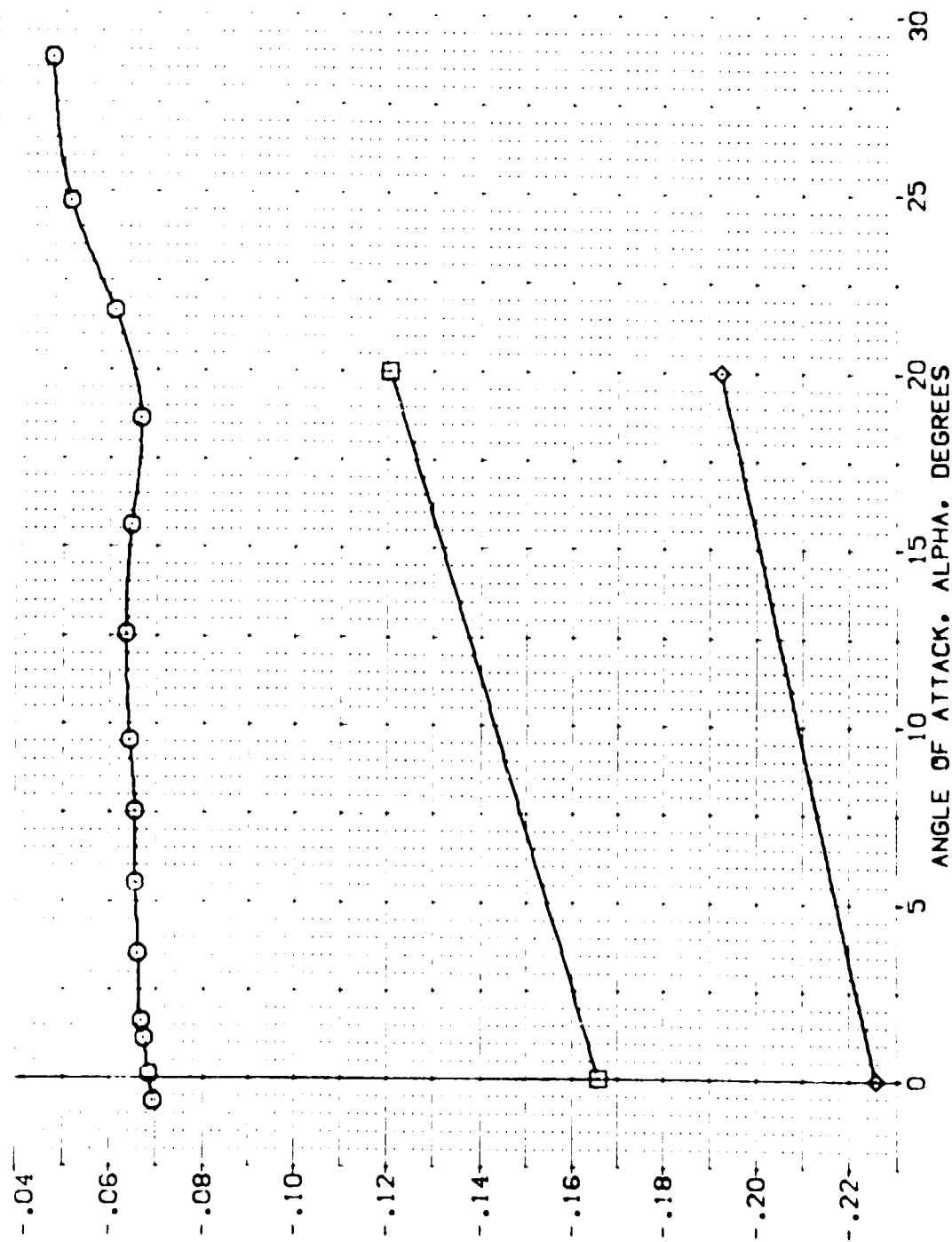


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(E)MACH = 1.20

DATA SET SYMBOL: Q  
 [VEJ011]  
 [VEJ024]  
 [VEJ038]

CONFIGURATION DESCRIPTION:  
 ARC 11-747 0A53A B C M F V I V  
 ARC 11-747 0A53A B C M F V I V  
 ARC 11-747 0A53A B C M F V I V

RUDDER: .000  
 .000  
 .000

BD/LAP: -11.700  
 -11.700  
 -11.700

SPEED: 25.000  
 55.000  
 85.000

REFERENCE INFORMATION:  
 SREF: 2.4210 50.00  
 LREF: 14.2440  
 BREF: 28.004  
 XREF: 32.3000  
 YREF: 11.2500  
 ZREF: 11.0300  
 SCALE: .0300

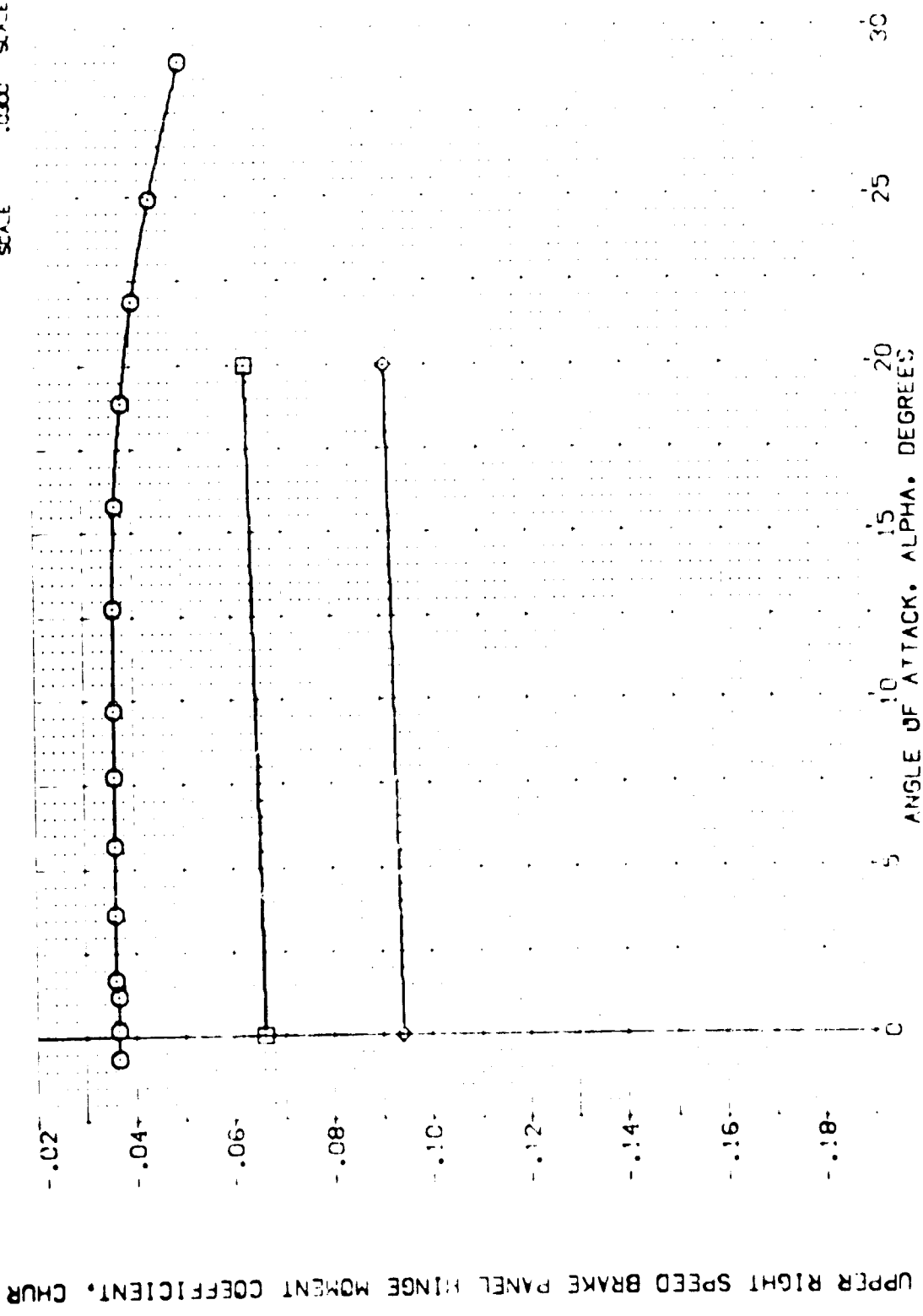


FIG. 35 SPEEDBRAKE HINGEMENTS

(A)  $\alpha_{AC}$  = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(VEJ011) ARC 11-747 DASSA B C H F VI V NOM. RV/L

(VEJ024) DATA NOT AVAILABLE

(VEJ036) DATA NOT AVAILABLE

RUDDER BESLAP SPEEDBRAK

.000 -11.700 75.000

.000 -11.700 55.000

.000 -11.700 85.000

REFERENCE INFORMATION

SREF 2.4210 SCAL

LREF 14.2140

BREF 28.1004

XMRP 32.3010

YMRP .0000

ZMRP 11.2500

SCALE .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

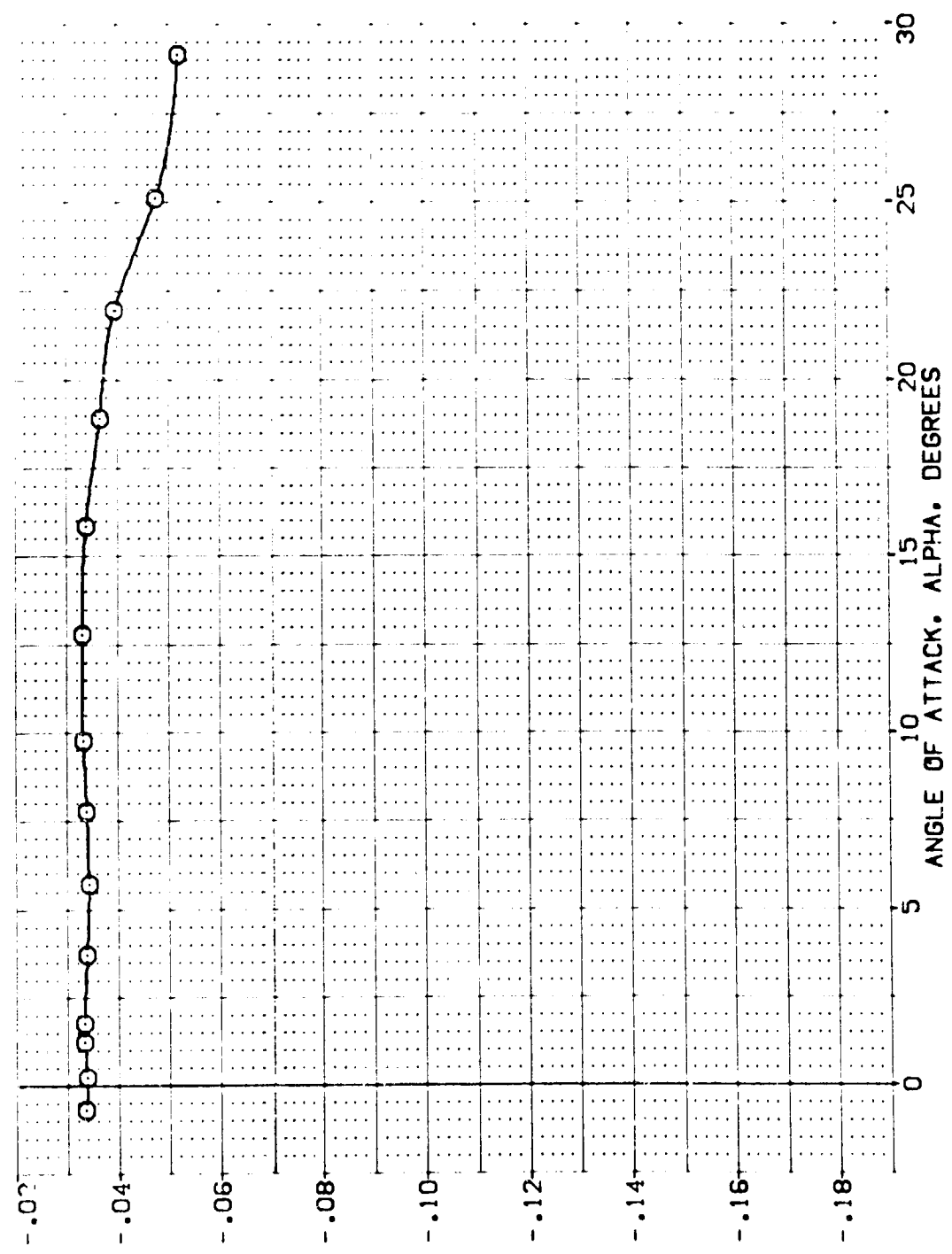


FIG. 35 SPEEDBRAKE HINGEMENTS

(B)MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    RUDDER BOFLAP    SPEED    REFERENCE INFORMATION

[YFJ011]	ARC 11-747 DAS3A B C M F V1 V	.000	-11.700	25.000	SREF	2.4210	50. FT.
[YFJ024]	ARC 11-747 DAS3A B C M F V1 V	.000	-11.700	55.000	LREF	14.2440	IN.
[YFJ038]	ARC 11-747 DAS3A B C M F V1 V	.000	-11.700	85.000	BREF	28.1004	IN.
					XMREF	32.3010	IN.
					YMREF	.0000	IN.
					ZMREF	11.2500	IN.
					SCALE	.0300	SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

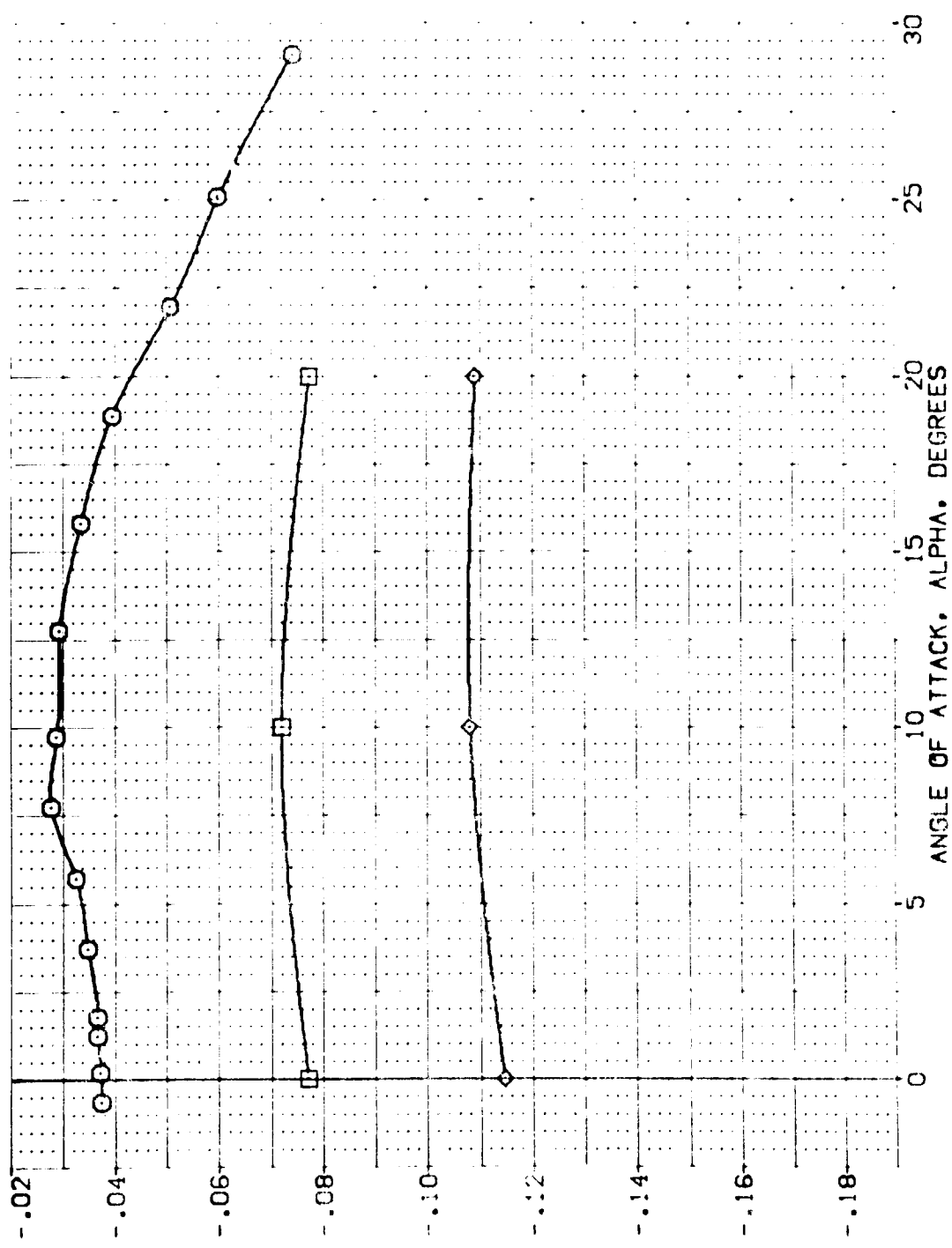


FIG. 35 SPEEDBRAKE HINGE MOMENTS

(CJ)MACH = .90



DATA SET SYMBOL: (VEJ011)  
 CONFIGURATION DESCRIPTION: ARC 11-747, QAS3A B C H F VI V NOM. RW/L  
 DATA NO.: AVAILABLE  
 DATA NO.: AVAILABLE

RUDDER BOFLAP SPEED  
 .000 -11.700 25.000  
 .000 -11.700 55.000  
 .000 -11.700 85.000

REFERENCE INFORMATION:  
 SREF 2.4210 SQ. FT.  
 LREF 14.2443  
 BREF 28.1004  
 XMG0 32.3010  
 YMG0 11.2500  
 ZMG0 0.0000  
 SCALE 0.000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

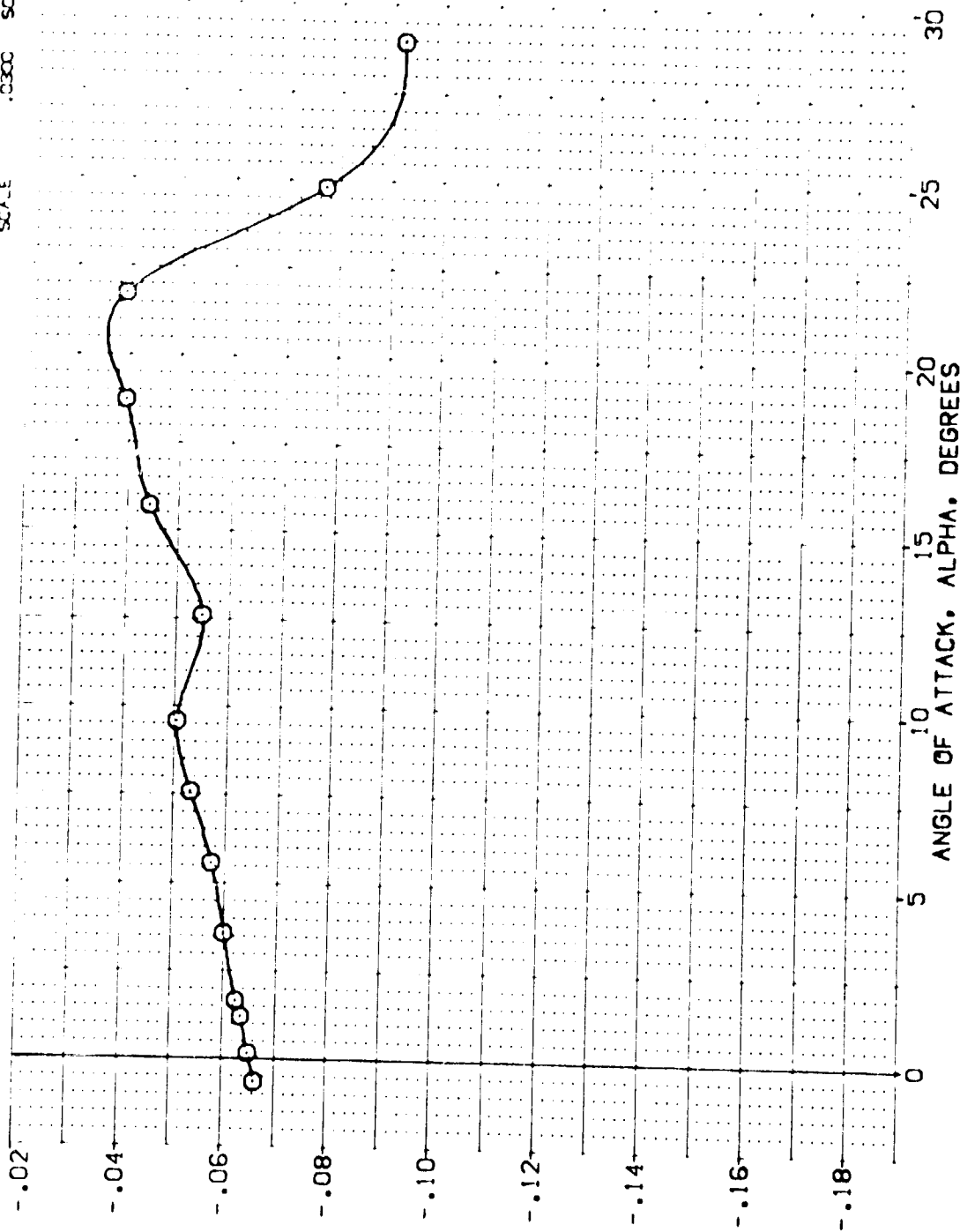


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MACH = 1.05

DATA SET SYMBOL: [YFJ011] [YFJ024] [YFJ036]

CONFIGURATION DESCRIPTION: ARC 11-747 BA53A B C M F VI V NON: RVL  
 ARC 11-747 BA53A B C M F VI V NON: RVL  
 ARC 11-747 BA53A B C M F VI V NON: RVL

RUDDER BOFLAP SPOBRK REFERENCE INFORMATION

RUDDER	BOFLAP	SPOBRK	SREF	LREF	BREF	XMRP	YMRP	ZMRP	SCALE
.000	-11.700	25.000	2.4210	14.2440	28.1004	32.3010	11.2500	11.2500	.0300
.000	-11.700	55.000							
.000	-11.700	85.000							

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

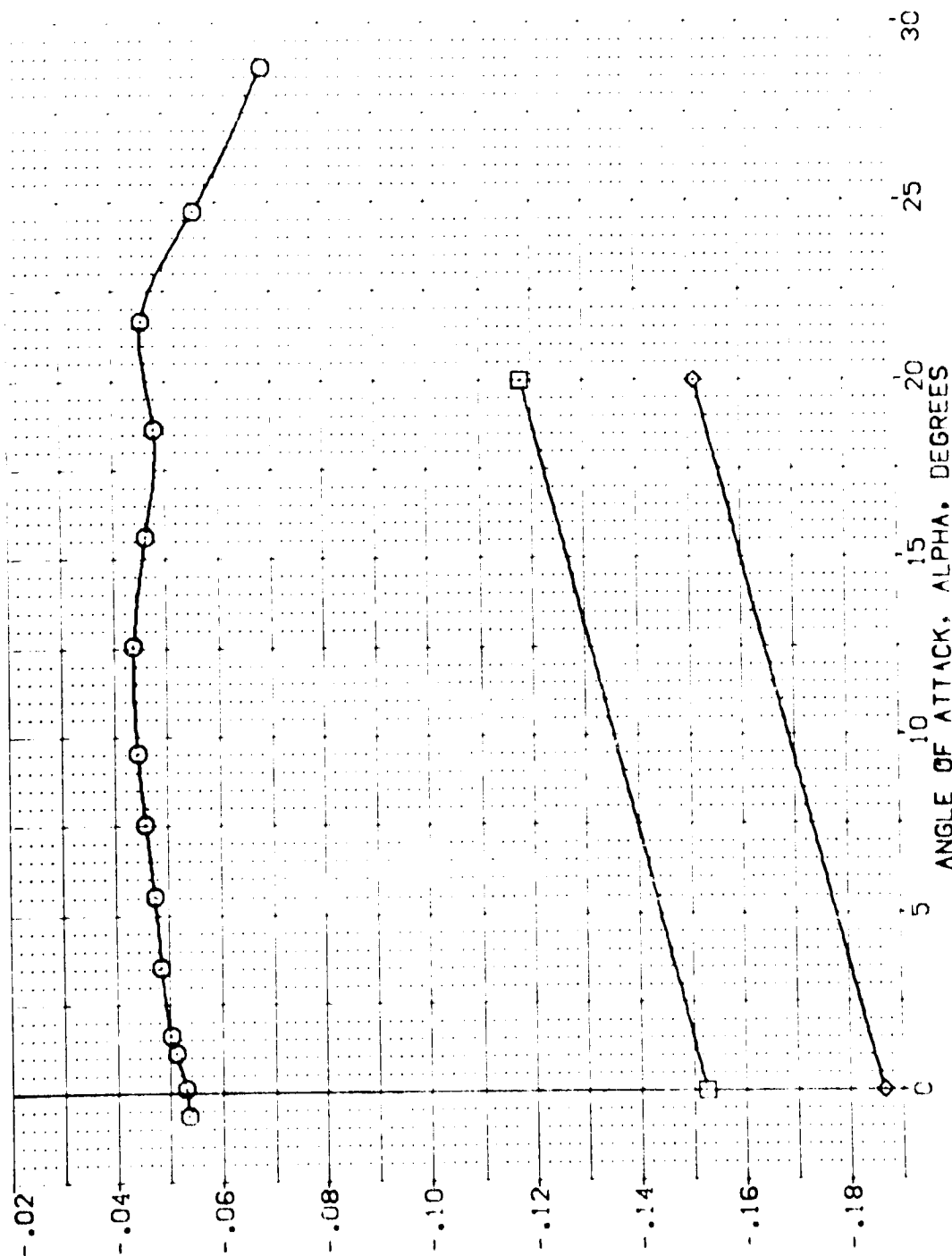


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(E)MAC = 1.20



DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
[YEQ11]	□	ARC 11-747 CAS3A B C M F V1 V	NOM. RV/L	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YEQ24]	◇	ARC 11-747 CAS3A B C M F V1 V	NOM. RV/L	.000	-11.700	55.000	LREF 14.2440 IN.
[YEQ38]	◇	ARC 11-747 CAS3A B C M F V1 V	NOM. RV/L	.000	-11.700	85.000	BREF 28.1004 IN.
							XMRD 32.3010 IN.
							YMRD 11.0000 IN.
							ZMRD 11.2500 IN.
							SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

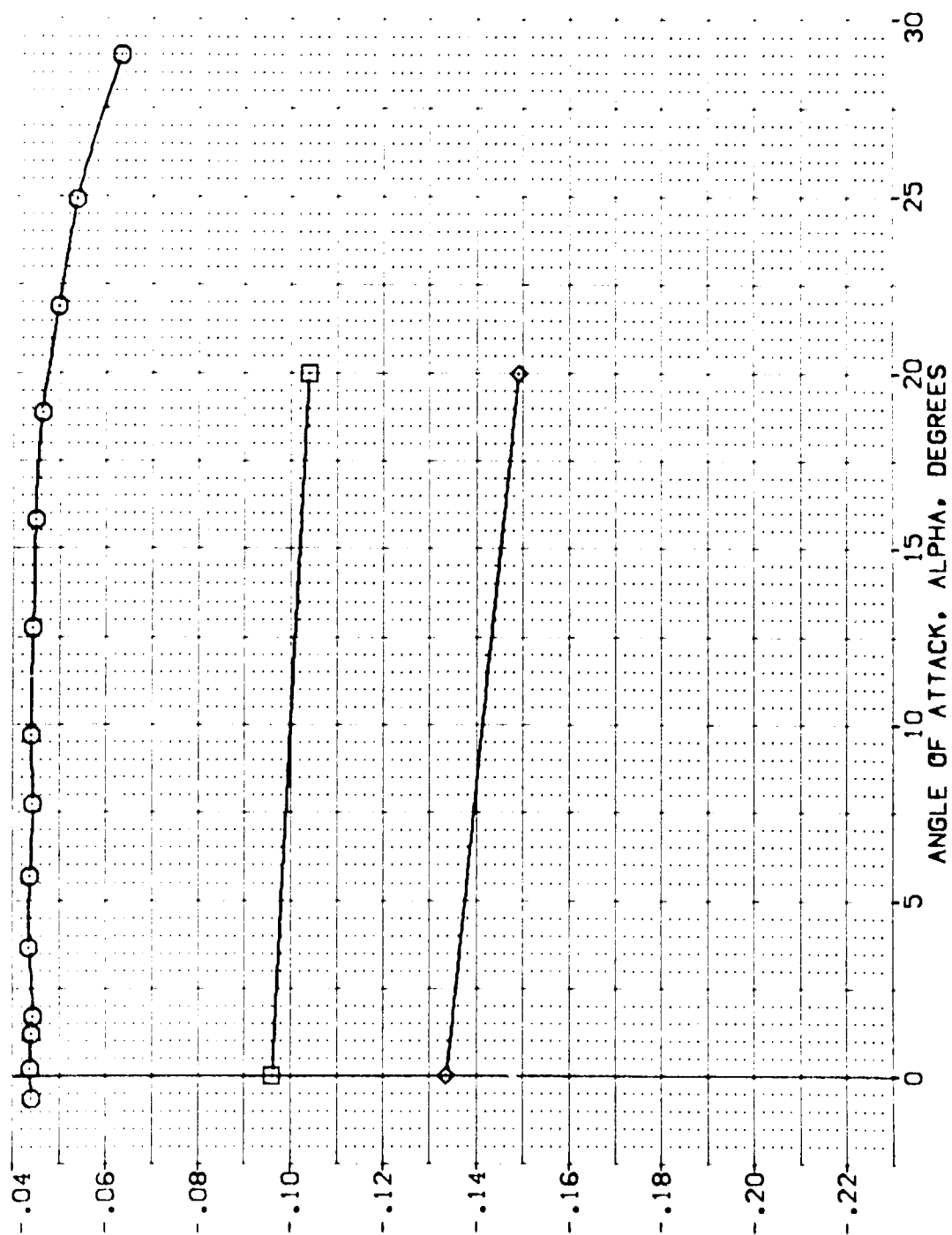


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(A)MACH = .60



DATA SET SYMBOL    CONFIGURATION DESCRIPTION  
(YEJ011)    ARC 11-747 OAS3A B C H F VI V NOM. RWL  
(YEJ024)    DATA NOT AVAILABLE  
(YEJ038)    DATA NOT AVAILABLE

RUDER    BDF LAP    SPDBRK  
.000    -11.700    25.000  
.000    -11.700    55.000  
.000    -11.700    85.000

REFERENCE INFORMATION  
SREF    2.4210    SQ.FT.  
LREF    14.2440    N  
BREF    28.1004    Z  
XMRP    32.3010    Z  
YMRP    .0000    Z  
ZMRP    11.2500    Z  
SCALE    .0300    Z

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

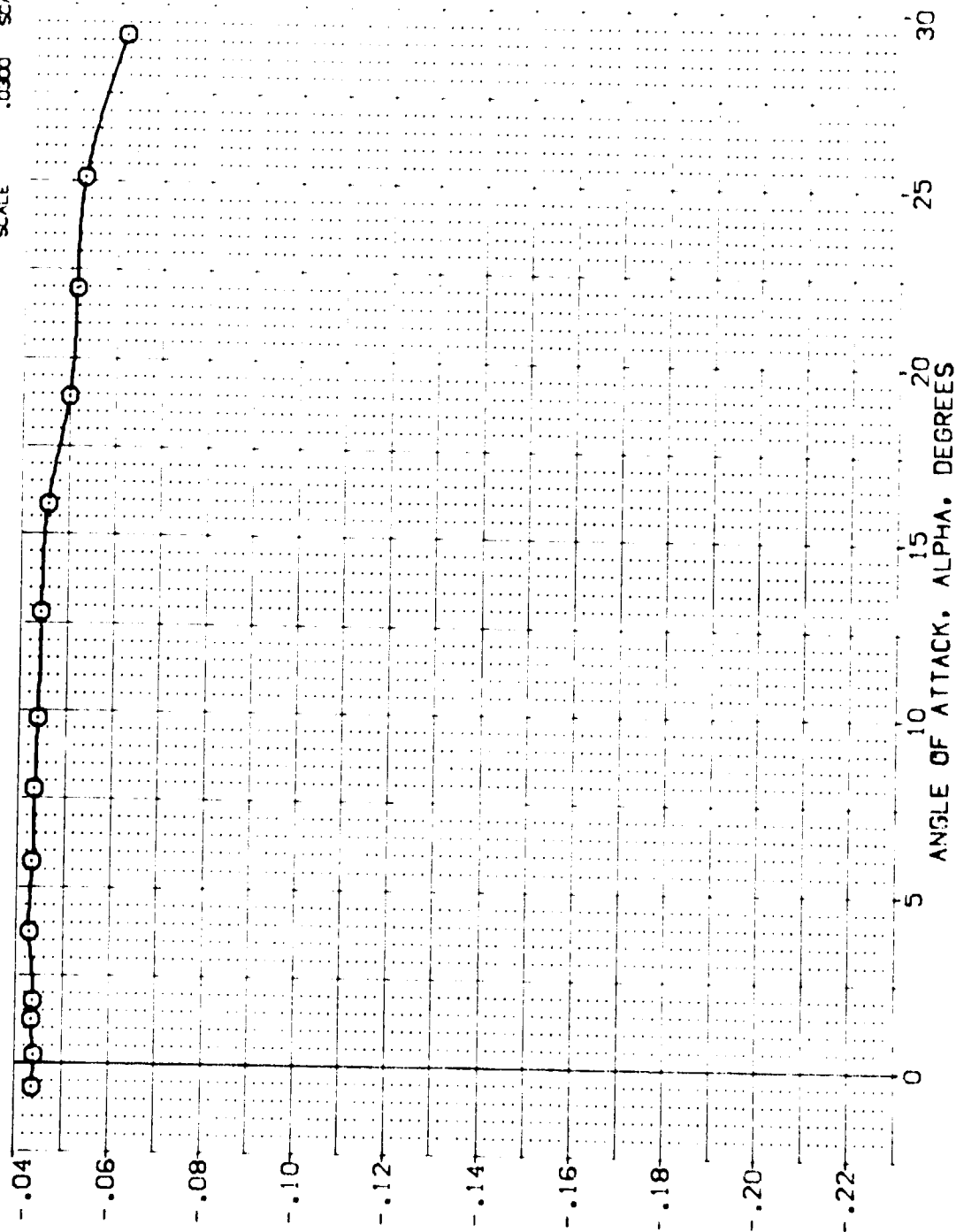


FIG. 35 SPEEDBRAKE HINGEMENTS

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION RUDDER BDF LAP SPEED SPOBRK REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	RUDDER	BDF LAP	SPEED	SPOBRK	REFERENCE INFORMATION
[VEJ01]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700	25.000		SREF 2.4210 SQ.FT.
[VEJ02]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700	55.000		LREF 14.2140
[VEJ03]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700	85.000		BREF 28.1004
[VEJ04]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700			XREF 32.3010
[VEJ05]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700			YREF 11.2500
[VEJ06]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700			ZREF 11.2500
[VEJ07]	ARC 11-747 CAS3A B C M F V1 V	.000	-11.700			SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

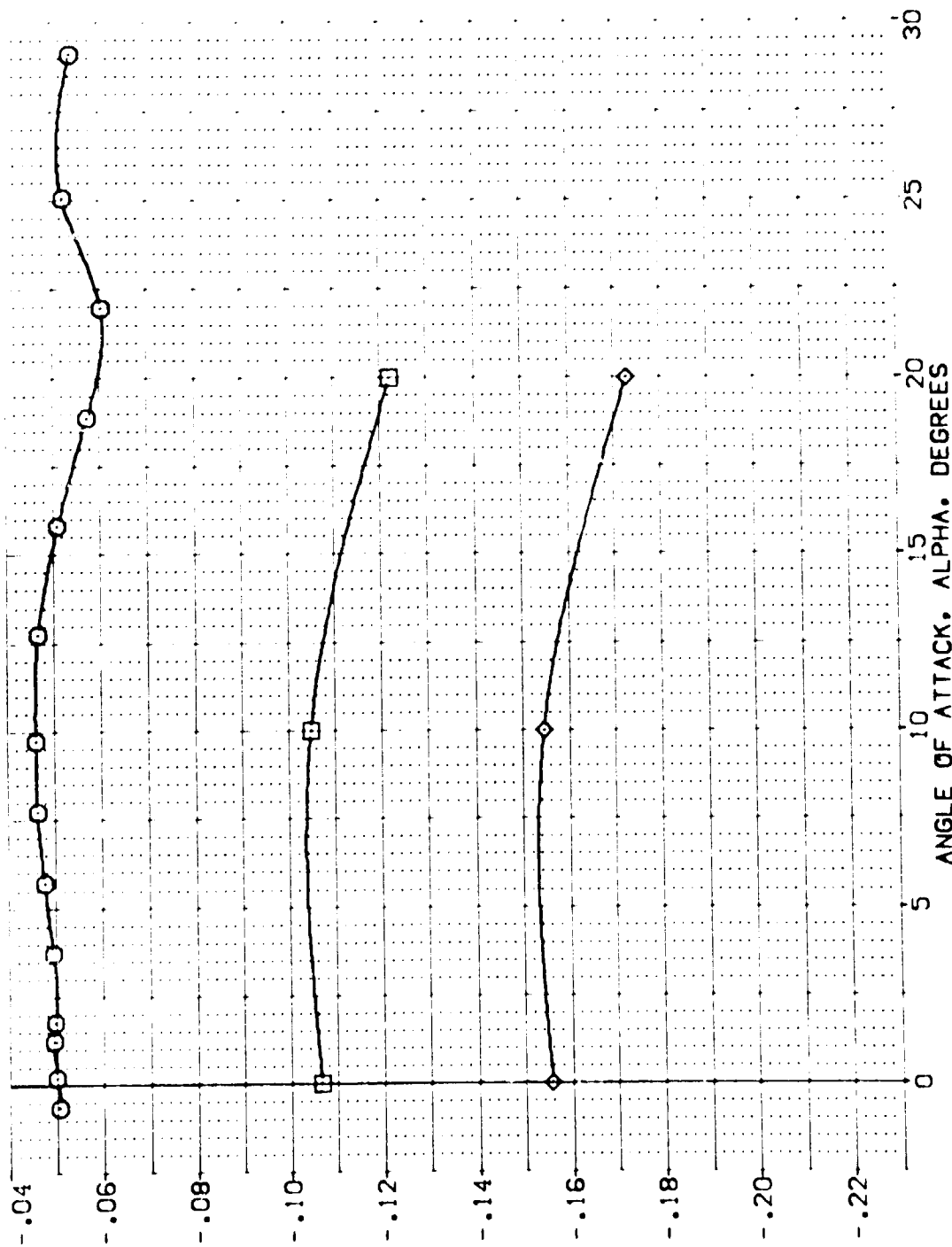


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MAC = .90

DATA SET SYMBOL: [VEJ011] [VEJ024] [VEJ038]  
 CONFIGURATION DESCRIPTION: ARC 11-747 DASSA S C M F VI V NOM. RV/L  
 DATA NOT AVAILABLE  
 DATA NOT AVAILABLE

RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
.000	-11.700	25.000	SREF 2.4210 SQ.FT.
.000	-11.700	55.000	LREF 14.2440 IN.
.000	-11.700	85.000	BREF 28.1004 IN.
			XMRP 32.3010 IN.
			YMRP .0000 IN.
			ZMRP 11.2500 IN.
			SCALE .0300 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

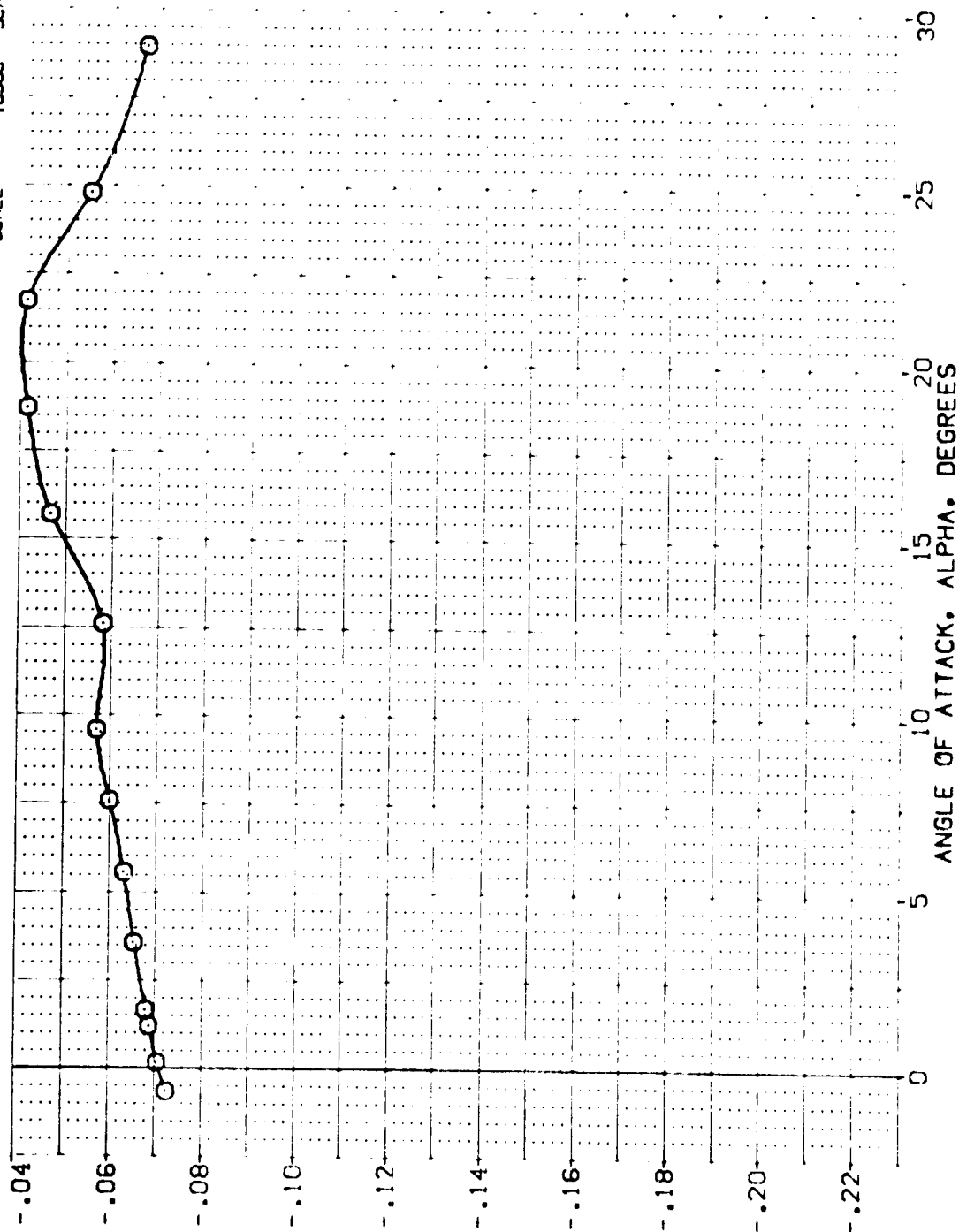


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(C)MACH = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    RUDDER    BOFLAP    SPEEDBRK    REFERENCE INFORMATION

(VEJ011)	ARC 11-747 CAS3A B C M F V	.000	-11.700	25.000	SREF 2.4210
(VEJ024)	ARC 11-747 CAS3A B C M F V	.000	-11.700	55.000	LRPF 14.244C
(VEJ038)	ARC 11-747 CAS3A B C M F V	.000	-11.700	85.000	BRPF 28.1004
					XRPF 32.3010
					YMRP .0000
					ZMRP 11.7500
					SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

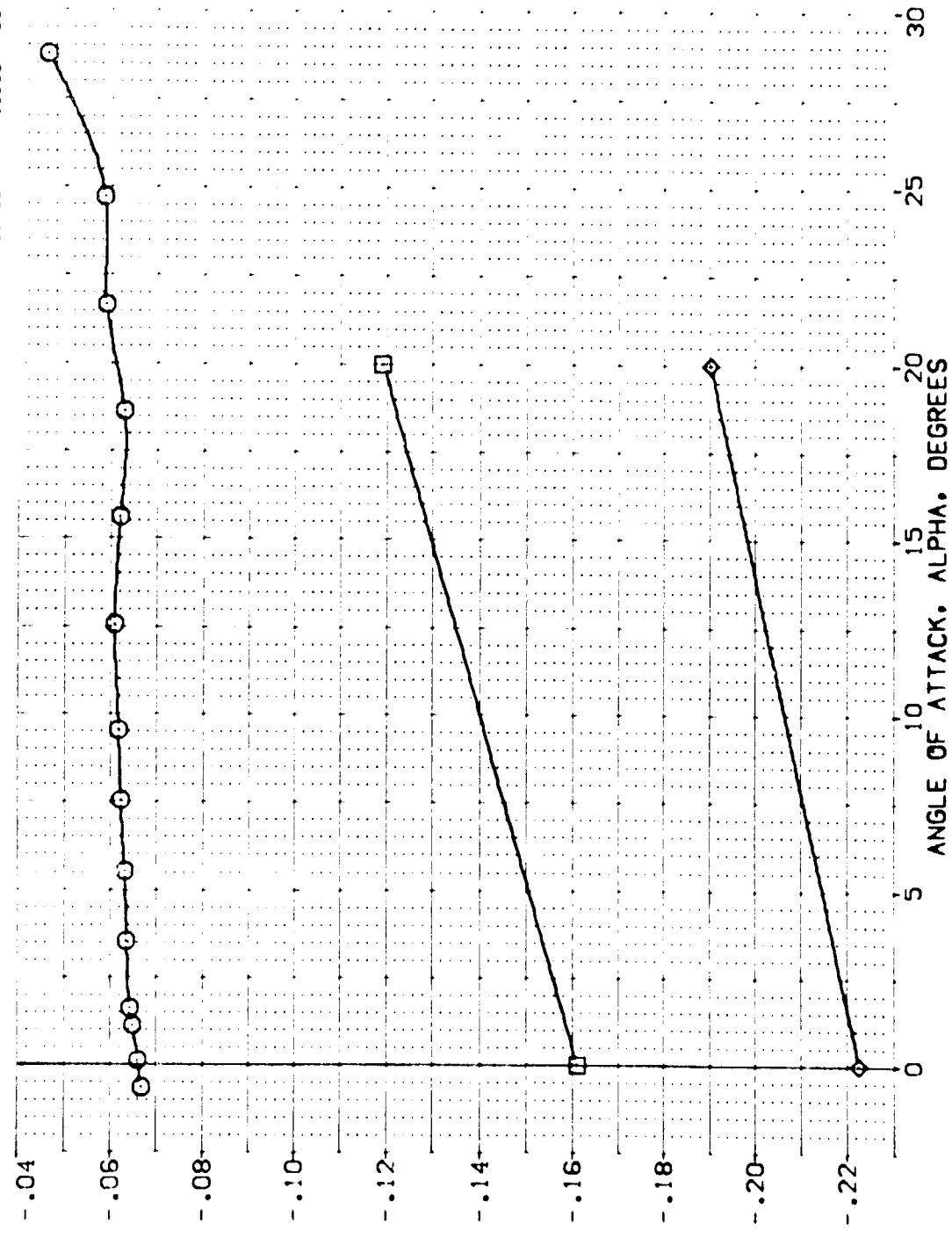


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(E)MAC = 1.20

DATA SET SYMBOL: (VEJ024) 8  
(VEJ038)

CONFIGURATION DESCRIPTION  
ARC 11-747 BAS3A B C H F VI V  
ARC 11-747 BAS3A B C H F VI V

NOY, RV/L  
NOY, RV/L

RUDER 80FLAP  
.000 -11.700  
.000 -11.700

REFERENCE INFORMATION  
SREF 2.4210 50. FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.9010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

SPEED BRAKE HINGE MOMENT DERIV. WRT SPEED BRAKE DEFL., DCHDSB, PER DEG

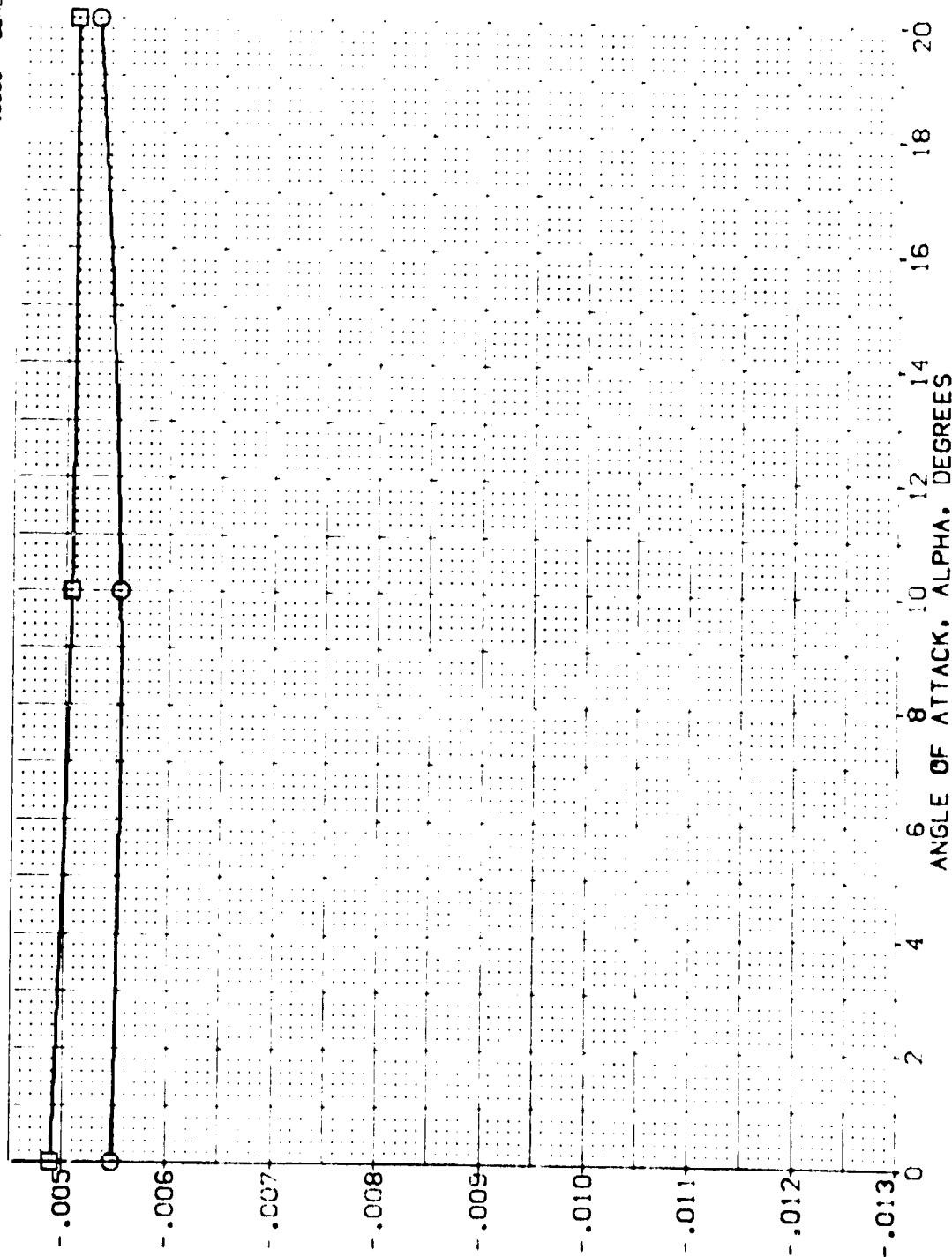


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(A)MAC<sub>cr</sub> = .60

DATA SET SYMBOL: [VEJ024] [VEJ038]  
 CONFIGURATION DESCRIPTION: ARC 11.747 CAS3A B C H F VI V NOT: RV/L  
 RUDDER: .000 .000  
 BDF LAP: -11.700 -11.700  
 DSB: 55.000 85.000  
 REFERENCE INFORMATION:  
 SREF: 2.4210 50.17  
 LREF: 14.2440  
 BREF: 28.1004  
 XMRP: 32.3010  
 YMRP: 11.2500  
 ZMRP: .0300  
 SCALE: .0300

SPEED BRAKE HINGE MOMENT DERIV. WRT SPEED BRAKE DEFL., DCHDSB, PER DEG

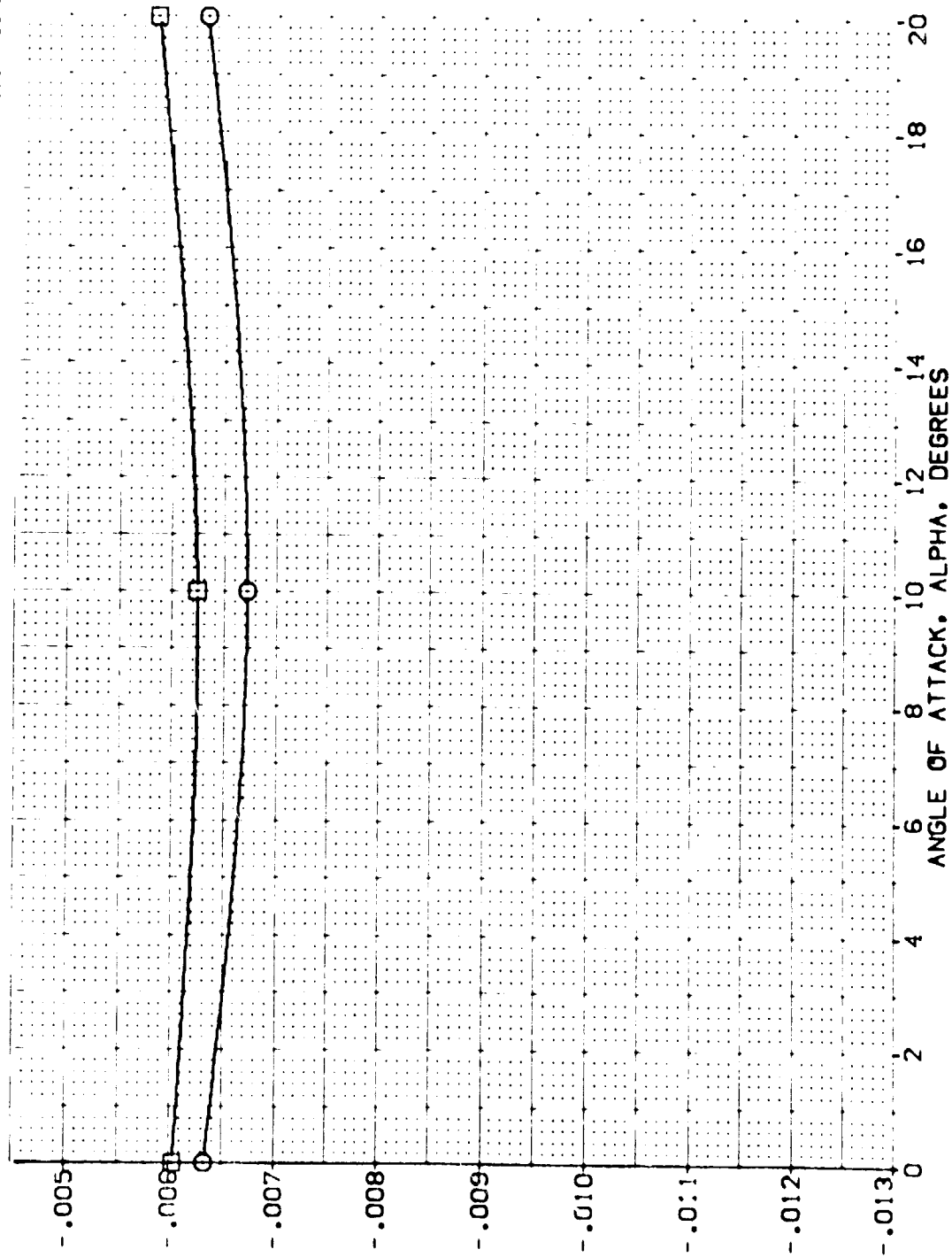


FIG. 35 SPEEDBRAKE HINGEMOMENTS

(B) VACH = .90

DATA SET SYMBOL: [VEJ024]  
 [VEJ038]

CONFIGURATION DESCRIPTION:  
 ARC 11-747 BA53A B C M F V1 V  
 ARC 11-747 BA53A B C M F V1 V

RUDDER: .000  
 BODY LAP: -11.700  
 DSB: 55.000  
 55.000  
 85.000

REFERENCE INFORMATION:  
 SREF: 2.4210 50.FT.  
 LREF: 14.2440  
 BREF: 78.1004  
 XMRP: 32.3010  
 YMRP: .0000  
 ZMRP: 11.2500  
 SCALE: 12.000

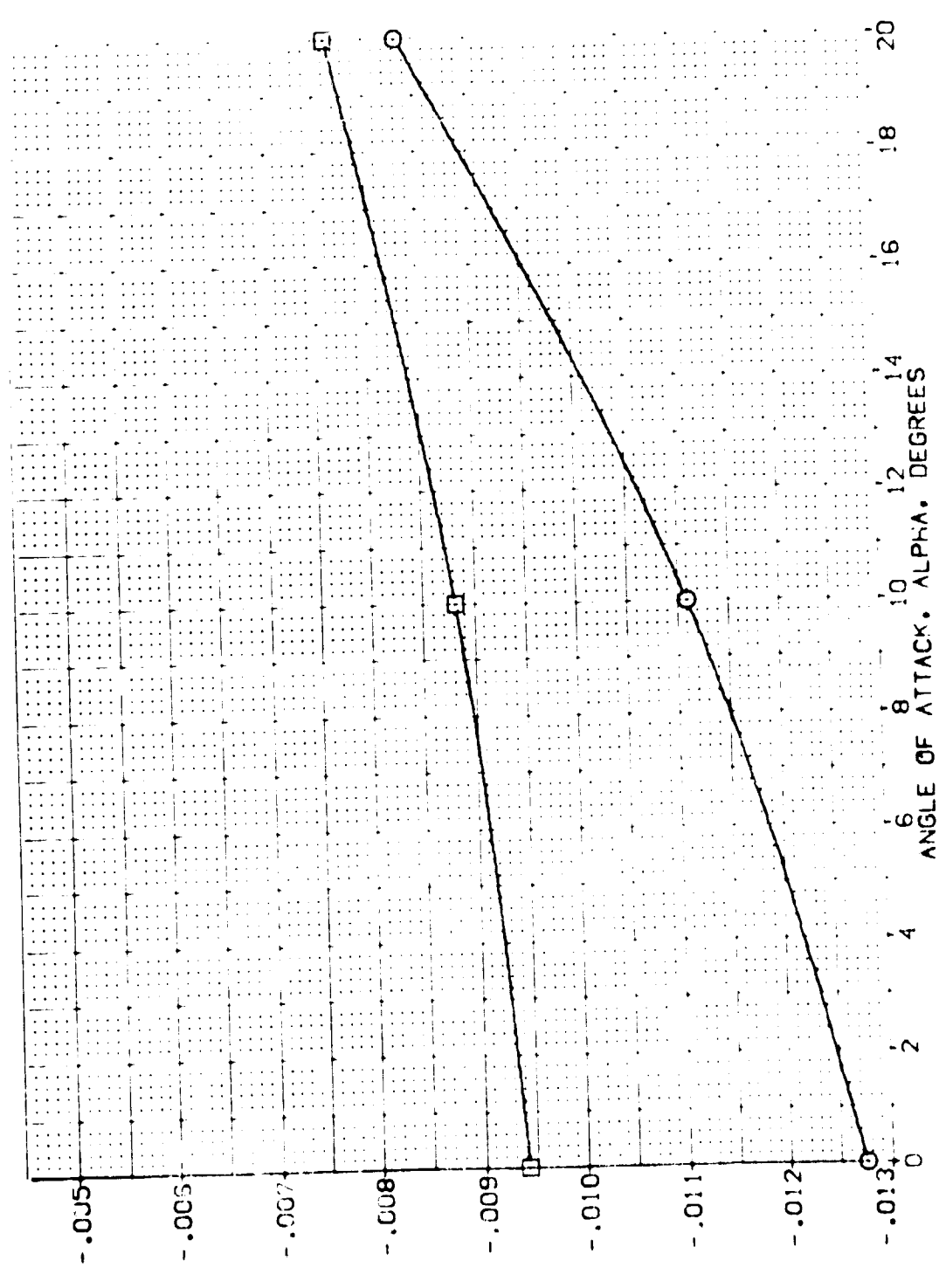


FIG. 35 SPEEDBRAKE HINGEMENTS

(C)MAC = 1.20

SPEED BRAKE HINGE MOMENT DERIV. WRT SPEED BRAKE DEFL. DCHOSB. PER DEG



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	AILRON	AILRON	SREF	SO.FT.
0	.000	.000	5.000	14.2440	14.2440
BETA	BFLAP	DEJ005	DEJ005	BREF	28.1004
.600	-10.000	10.000	10.000	XREF	32.3010
BOFLAP	RUDDER			YREF	.0000
-10.000	-10.000			ZREF	11.2500
RUDDER	ELEV-R			SCALE	.0000
25.000	-10.000				
ELEV-L					
-10.000					

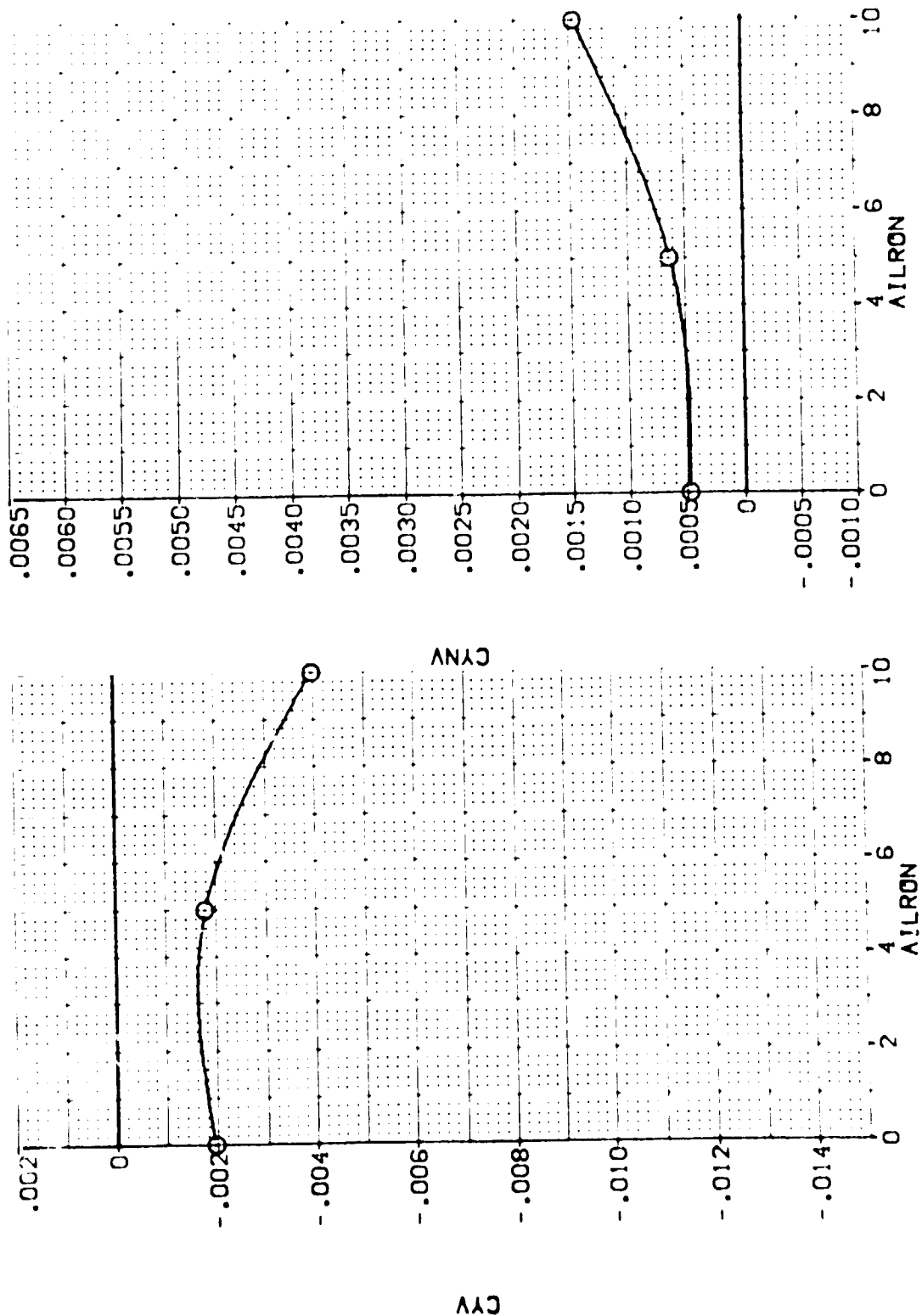


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
○	10.000	ELEVON	.600	BETA	.000	DATASET	AILRON	SREF	2.4210	52. FT.		
		SPDRON	-10.000	BD FLAP	-11.700	DEJ002	DEJ005	LREF	14.2440			
		ELEV-L	25.000	RUDDER	.000	DEJ021		BREF	28.1004			
		ELEV-R	-10.000	ELEV-R	-10.000			XREF	32.3010			
								YREF	.0000			
								ZREF	11.2500			
								SCALE	.0000			

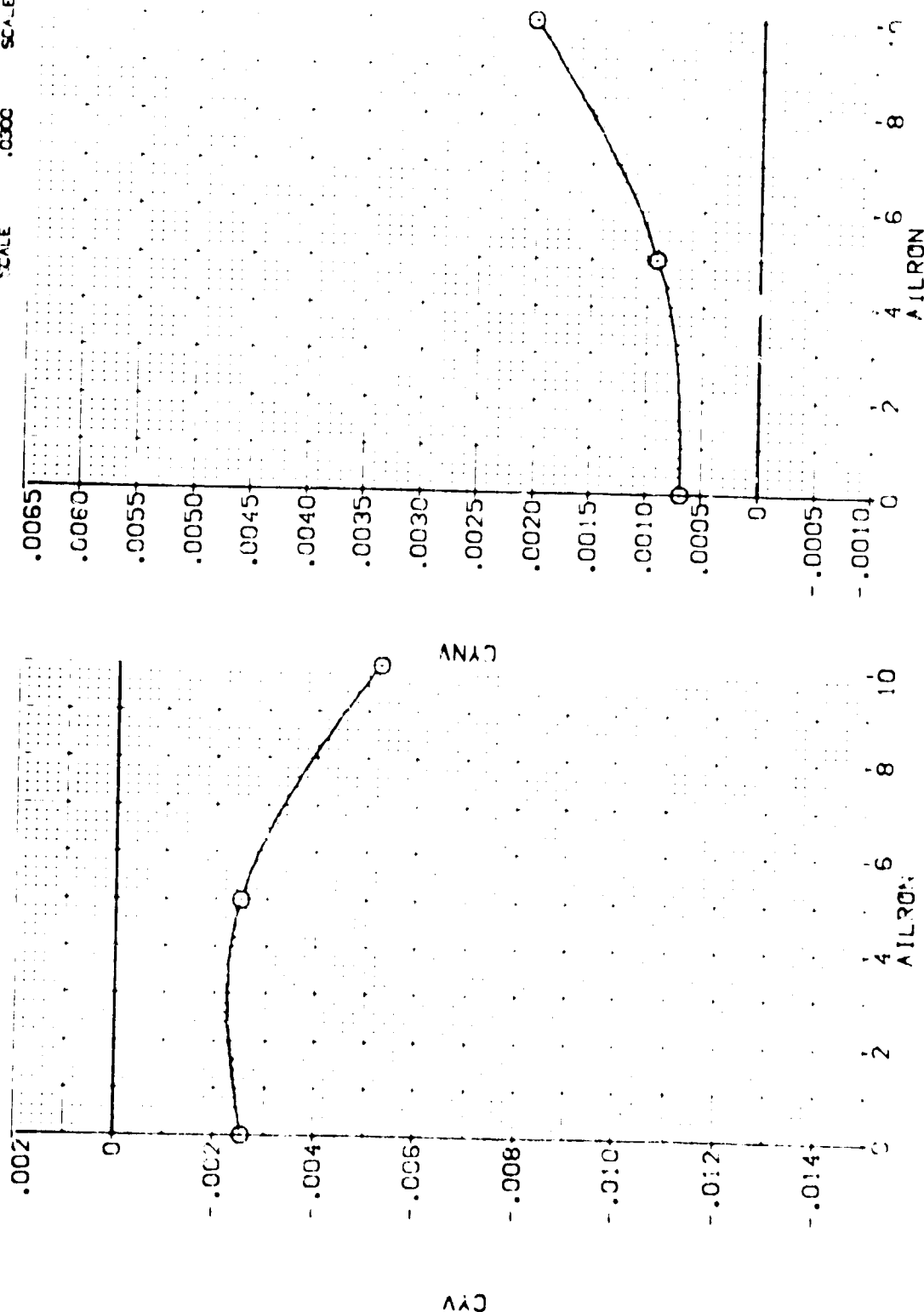
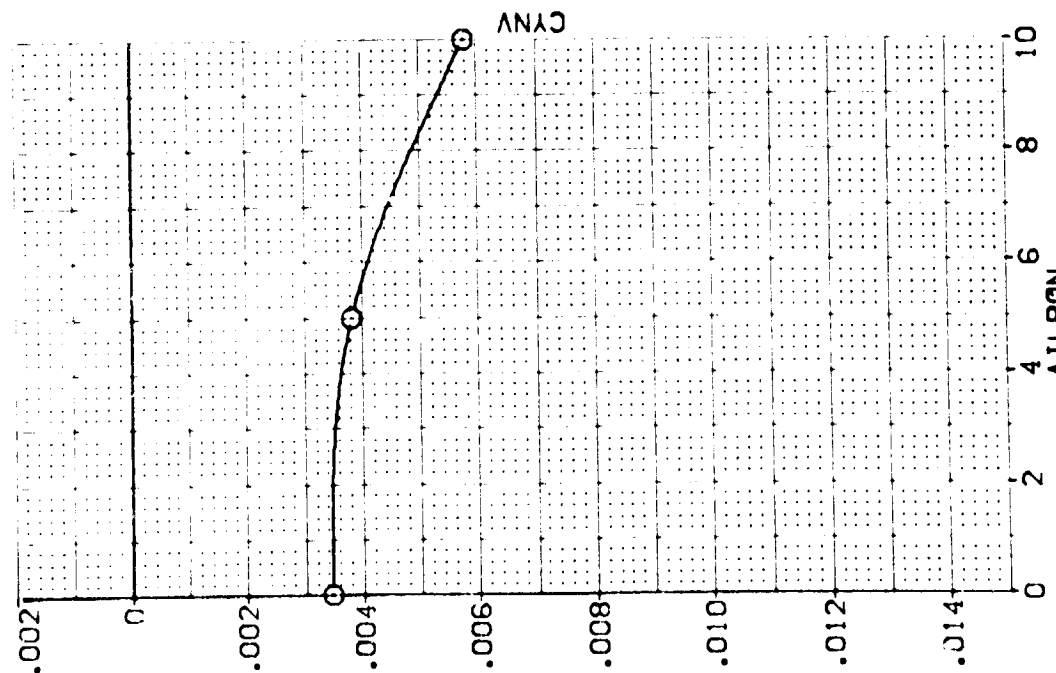


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL



7-15

ALPHA 20:00  
SYNOPSIS



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ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
		MACH	BETA	BOFLAP	ELEV-R	AILRON	DEJ005	SREF	REF	SD.F.T.	SCALE
○	.000	.800	-10.000	25.000	-10.000	.000	DEJ005	5.000	14.2440	IN.	
		ELEVON		RUDDER		10.000			28.1004	IN.	
		SPOBRK		ELEV-L					32.3010	IN.	
									.0000	IN.	
									11.2500	IN.	
									.0300	SCALE	

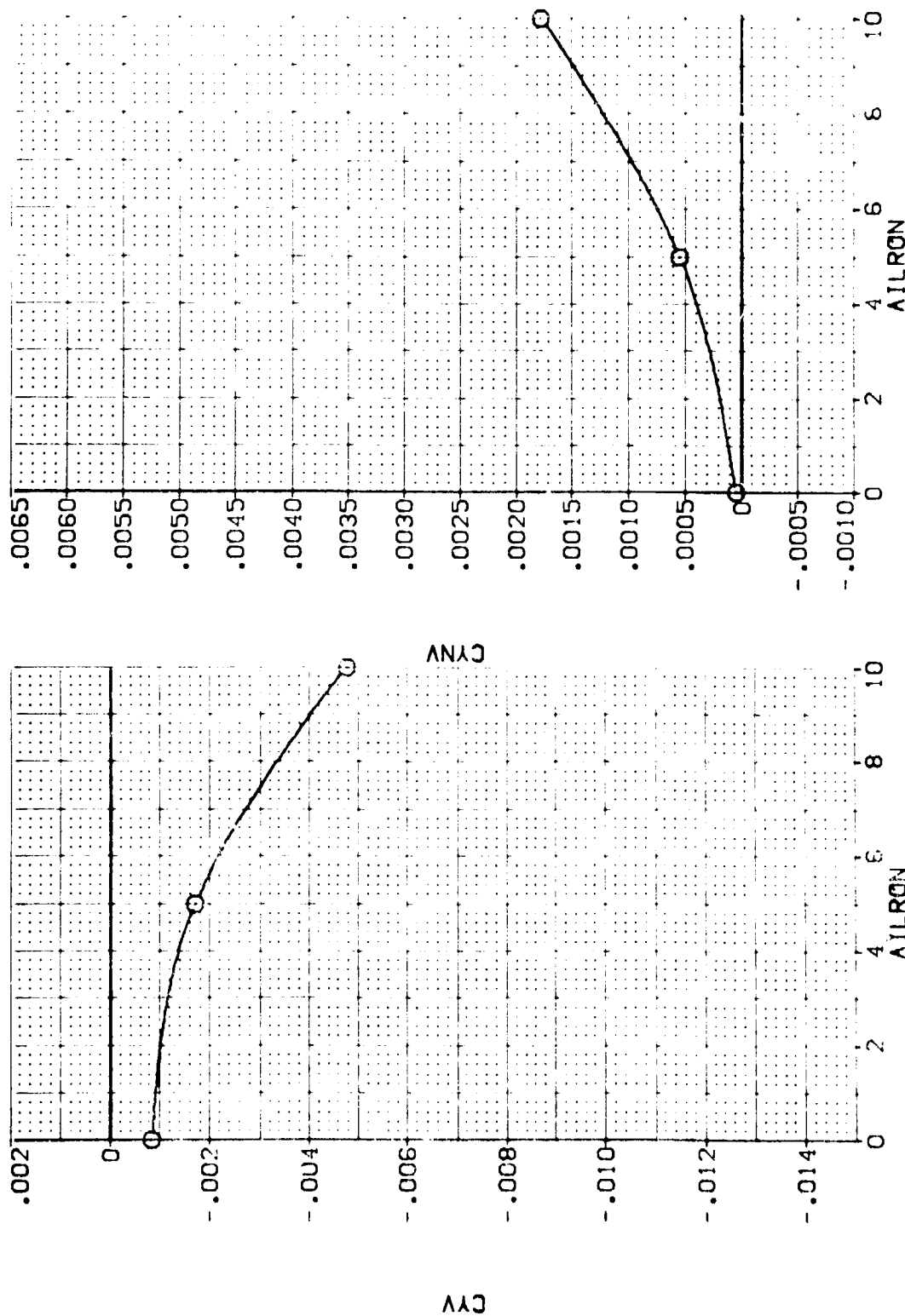


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W V NOM. RN/L (DEJ002)

SYMBOL  
○

ALPHA  
10.000

MACH  
ELEVON  
SPOBRK  
ELEV-L

PARAMETRIC VALUES  
BETA  
BOFLAP  
RUDDER  
ELEV-R

.800  
-10.000  
25.000  
-10.000

DATA SOURCE  
AILRON  
10.000

DATASET  
DEJ005

AILRON  
5.000

REFERENCE INFORMATION  
SREF  
LREF  
BREF  
XMPD  
YMPD  
ZMPD  
SCALE

2.4210  
14.2440  
28.1004  
32.3010  
11.2500  
10.300

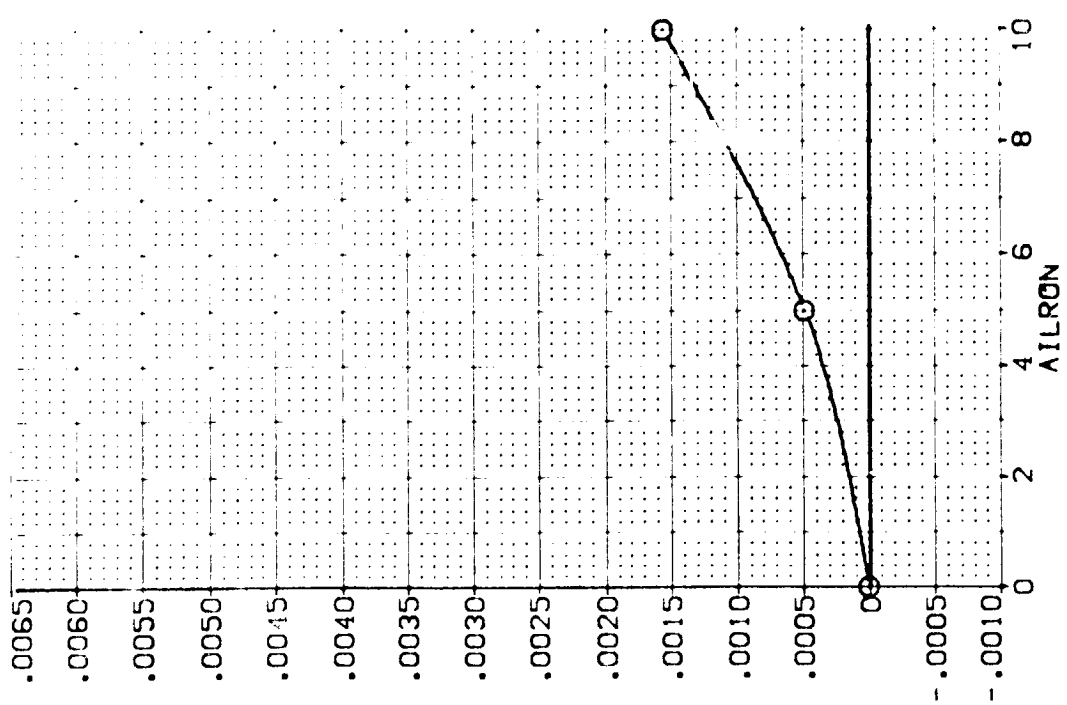
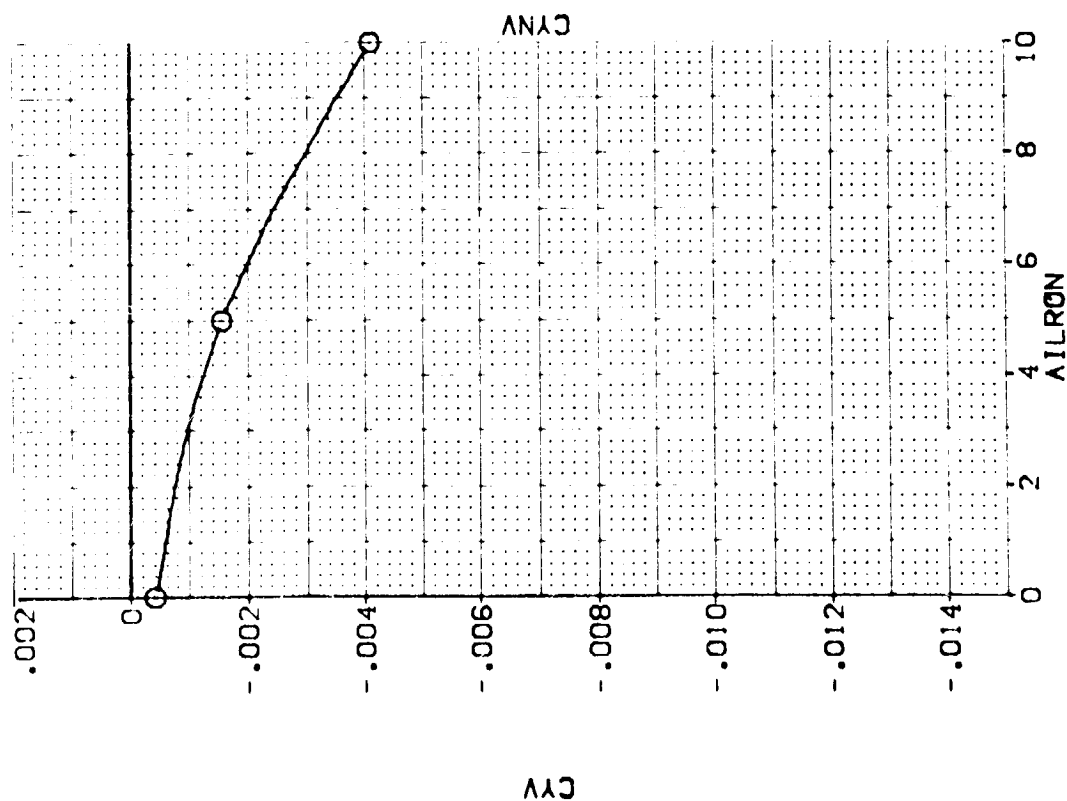


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V N(M). RN/L (DEJ002)

SYMBOL O	ALPHA 20.000	MACH ELEVON	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
			BETA -10.000	AILRON 5.000	SREF 2.4210
			BOFLAP 25.000	DEJ002	LREF 14.2440
			RUDER -10.000	DEJ021	BREF 28.1004
			ELEV-R -10.000	DEJ005	XMRP 32.3010
					YMRP 11.2500
					SCALE 11.2500
					SCALE .0300

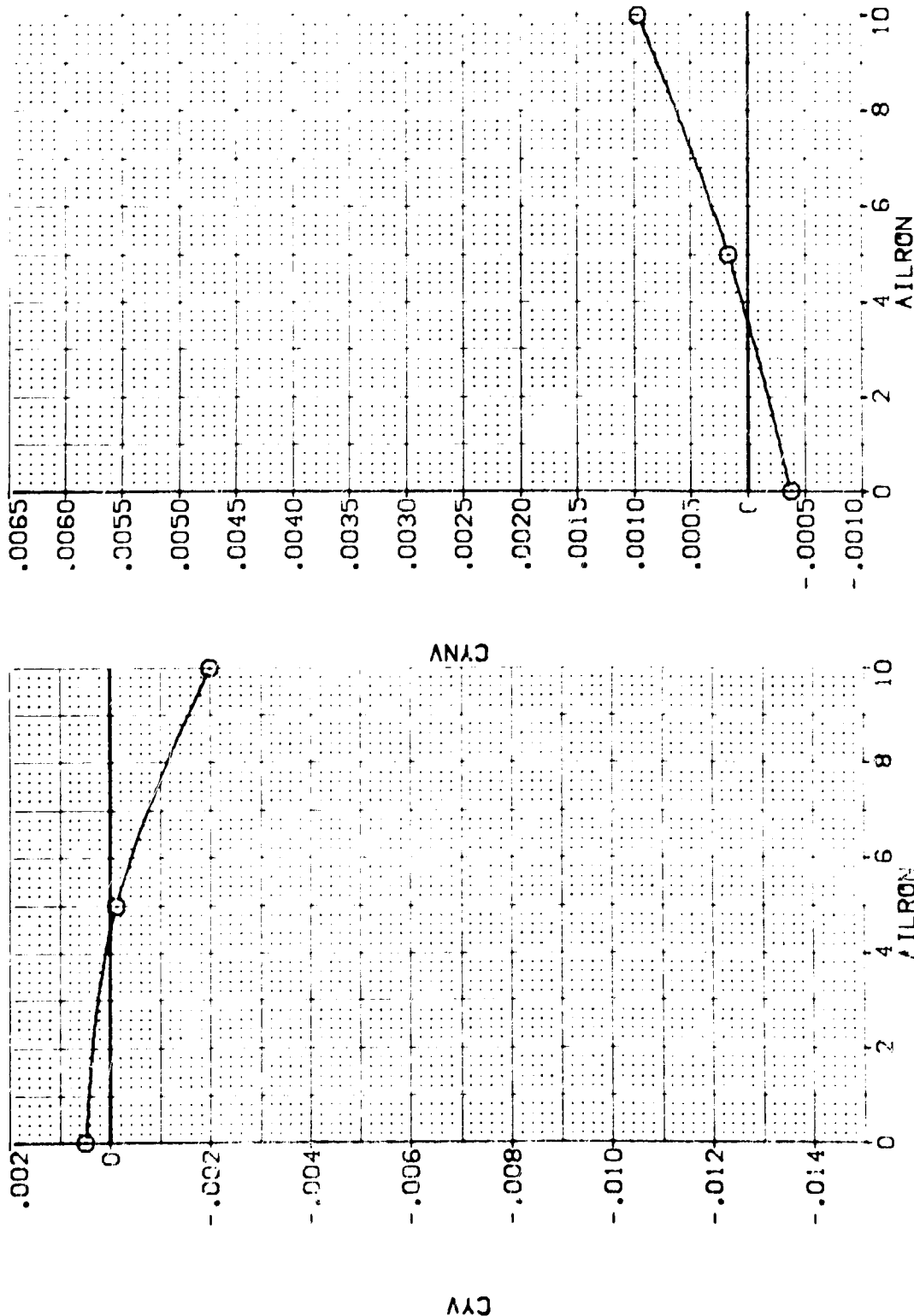


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 OA53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL  
○

ALPHA  
.000

MACH  
TLEV-1  
SPDRN  
ELEV-L

PARAMETRIC VALUES  
.900 BETA  
-10.000 BOFLAP  
25.000 RUDDER  
-10.000 ELEV-R

DATA SOURCE  
AILRON  
.000  
10.000

DATASET  
DEJ005  
5.000

REF  
XMRP  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION  
2.4210 SQ.FT.  
14.2440 IN.  
28.1004 IN.  
32.9010 IN.  
11.2500 IN.  
6.3000 IN.

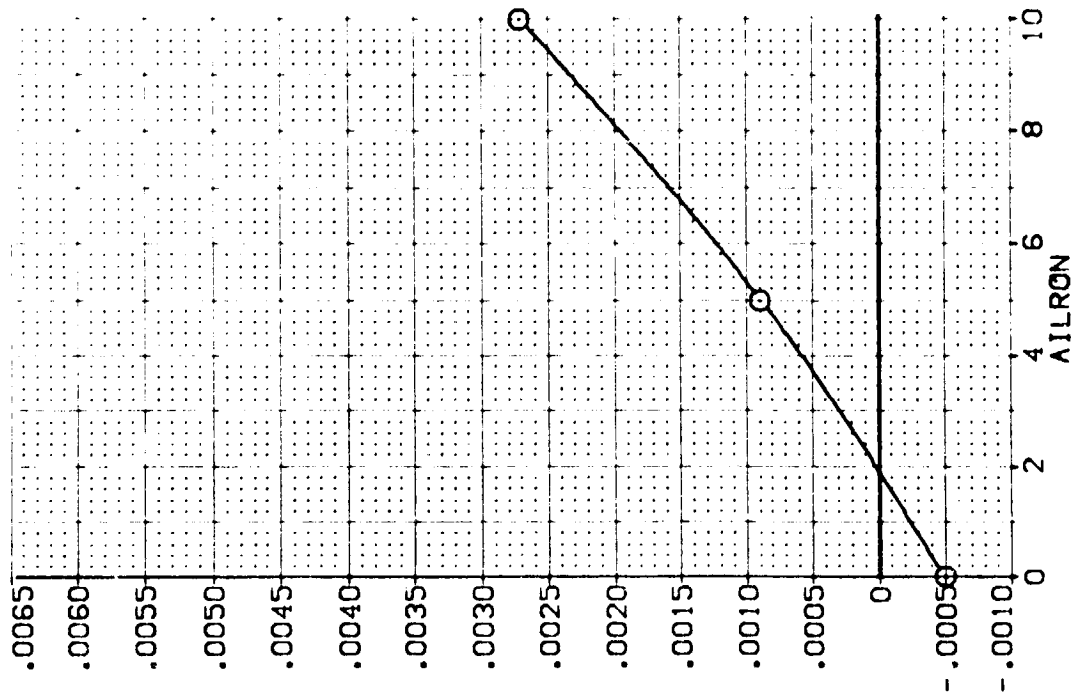
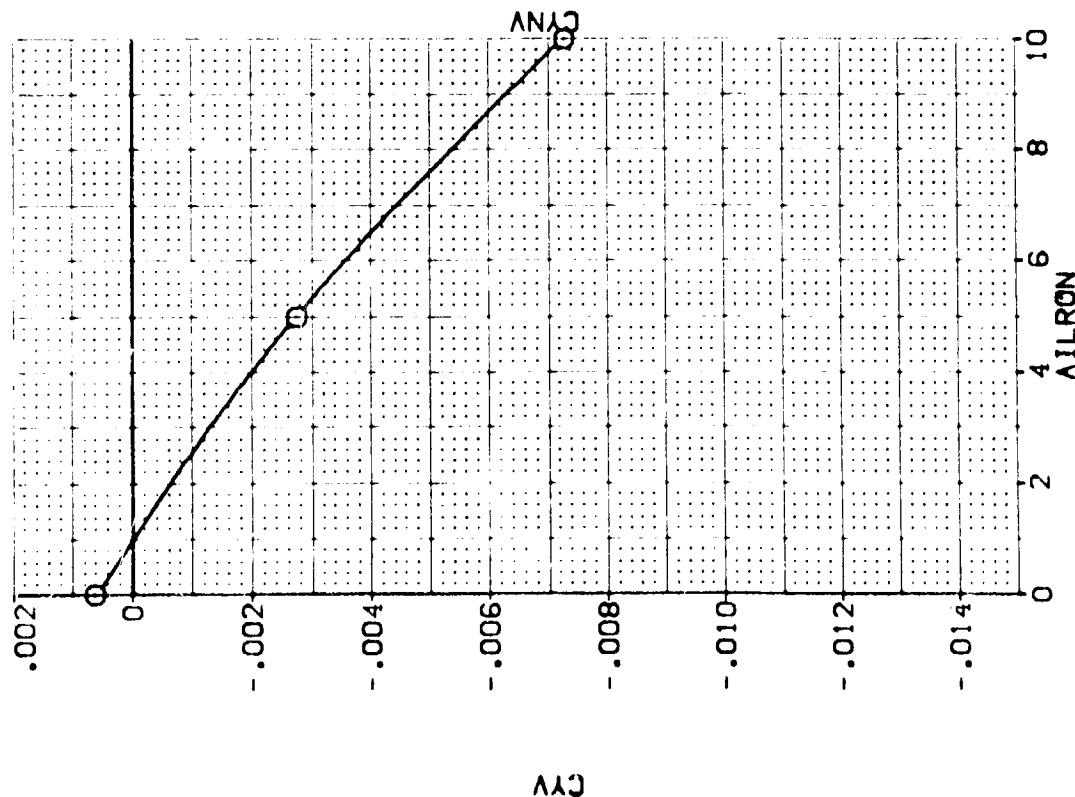


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

DATA SOURCE  
AIRLON  
0.000  
10.000

PARAMETRIC VALUES	BETA	BOFLAP	RUDDER	ELEV-R
.500				
10.000				
25.000				
10.000				

ALPHA  
10.000

0  
smed

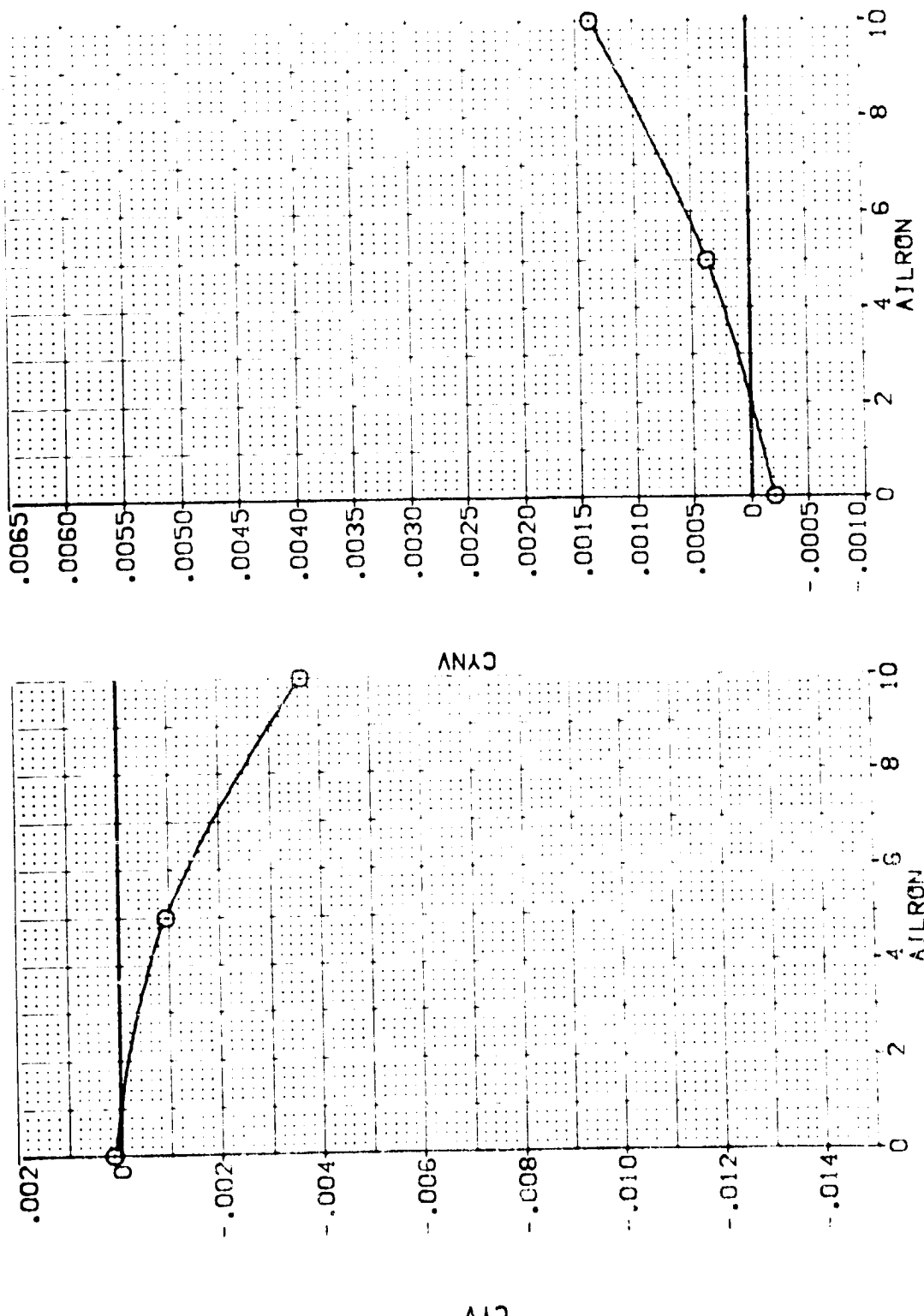


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL  
○

ALPHA  
20.000

MACH  
ELEVON  
SPOBRK  
ELEV-L

PARAMETRIC VALUES  
BETA  
BOFLAP  
RUDDER  
ELEV-R

DATA SOURCE  
AILRON  
10.000

DATA SET  
DEJ005

AILRON  
5.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XPRP 32.3010 IN.  
YPRP .0000 IN.  
ZPRP 11.2500 IN.  
SCALE .0300

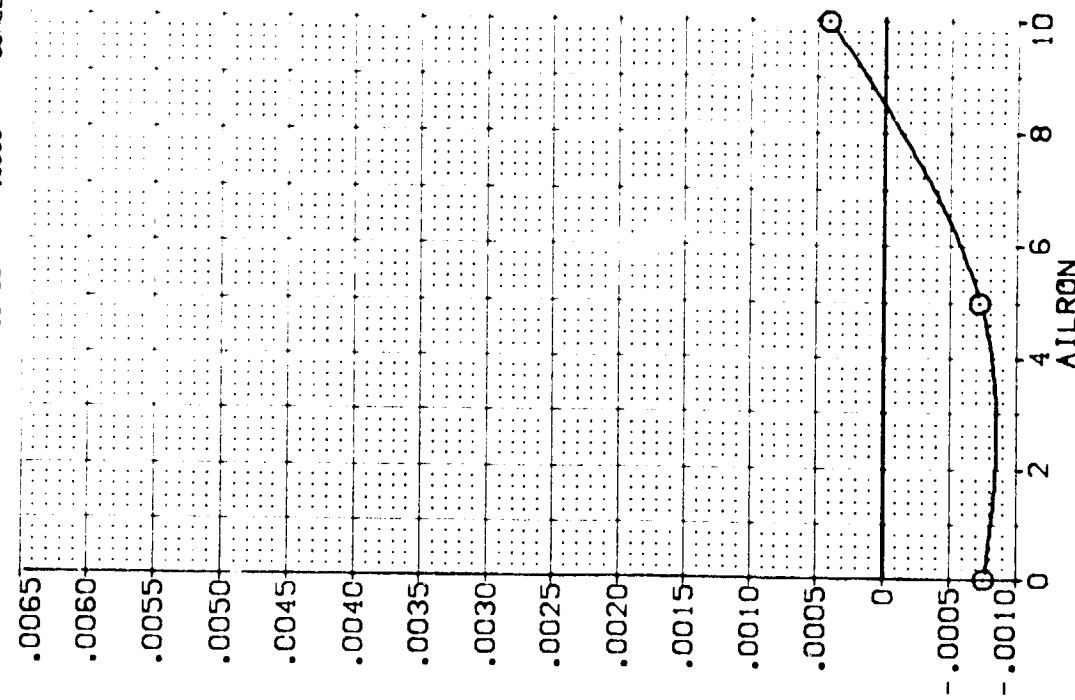
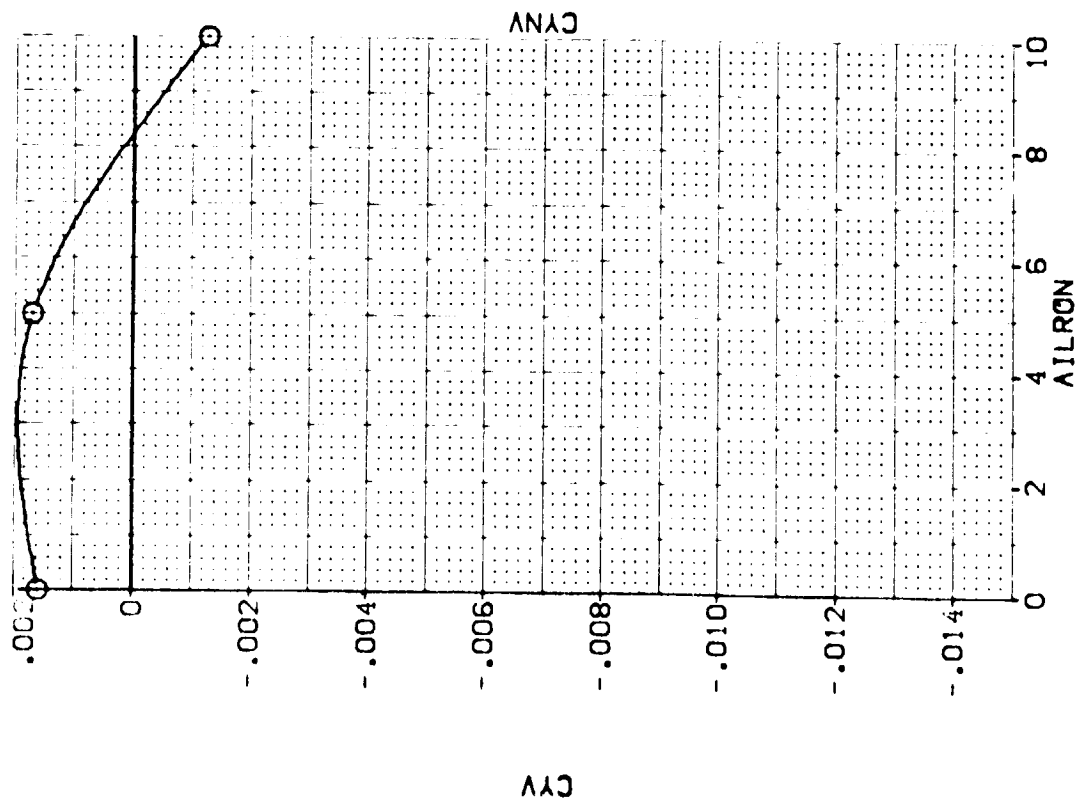


FIG. 35 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATA SET	AILRON	SREF	REFERENCE INFORMATION
○	.000	ELEVON	1.050 BETA	AILRON	DEJ005	5.000	LREF	2.4210 SQ.FT.
		SPOBRK	-10.000 BOFLAP	.000			BREF	14.2440 IN.
		ELEV-L	25.000 RUDDER	10.000			XMRP	28.1004 IN.
			-10.000 ELEV-R				YMRP	32.3010 IN.
							ZMRP	11.2500 IN.
							SCALE	.0300

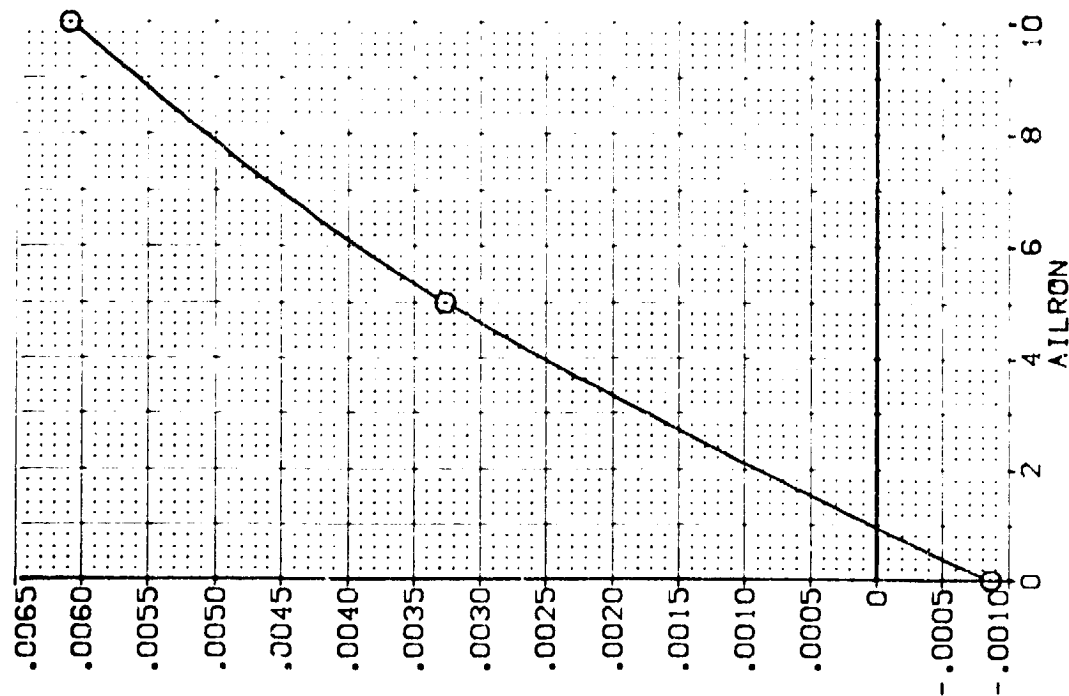
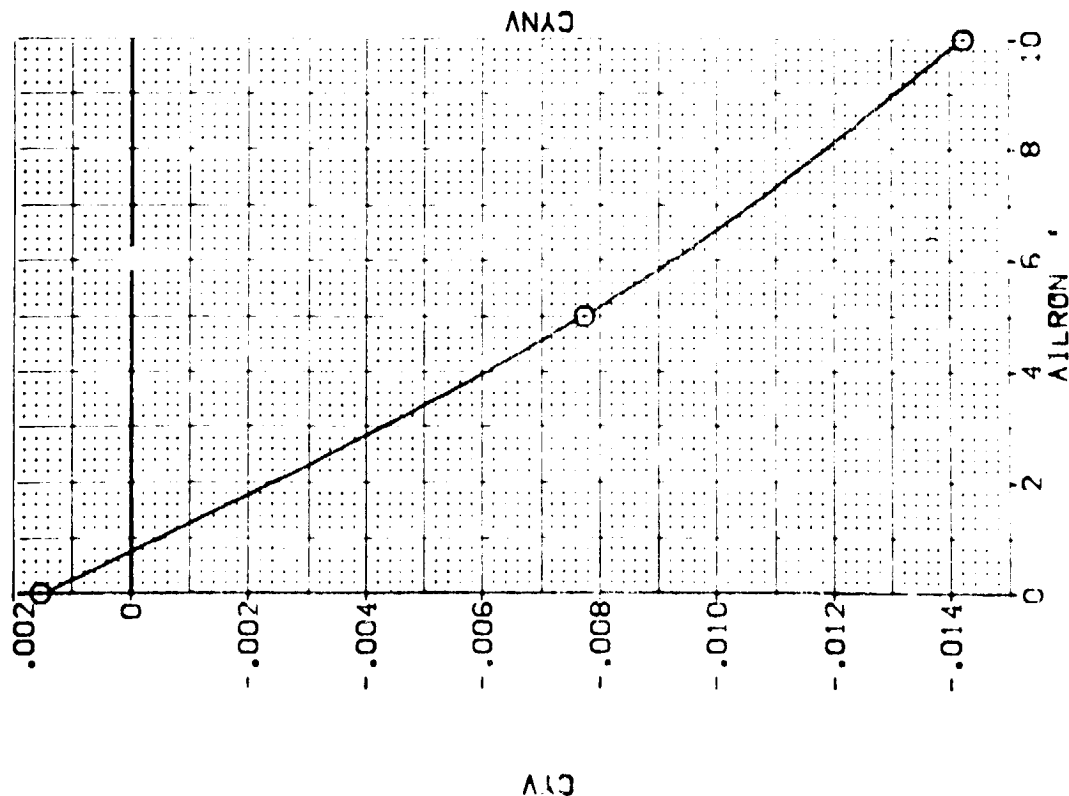


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL





ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	20.000	ELEVON	1.050 BETA	AILRON	SREF
		SPOBRK	-10.000 BDFLAP	.000 DEJ005	LREF
		ELEV-L	25.000 RUDDER	10.000	BREF
			-10.000 ELEV-R		XPRP
					YPRP
					ZPRP
					SCALE
					SCALE

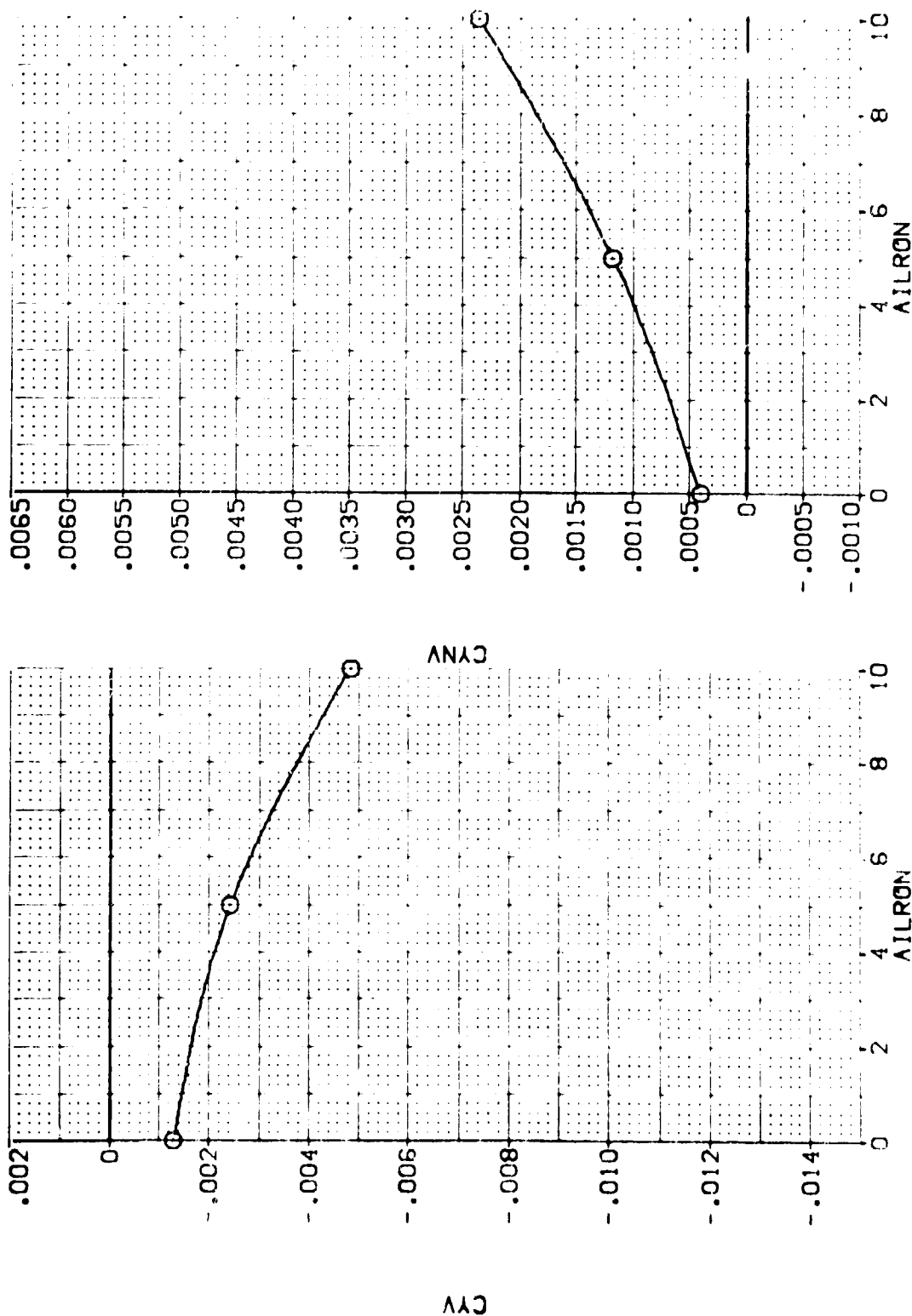


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL  
○

ALPHA  
.000

MACH  
ELEV-ON  
SPOBRK  
ELEV-L

PARAMETRIC VALUES  
1.200 BETA  
-10.000 BOFLAP  
25.000 RUDDER  
-10.000 ELEV-R

.000 DATASET  
-11.700 DEJ002  
.000 DEJ021  
-10.000

DATA SOURCE  
AILRON  
.000  
10.000

DEJ005  
AILRON  
5.000  
SREF  
LREF  
BREF  
XMRP  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION  
2.421C  
14.244C  
28.1004  
32.301C  
.000C  
11.250C  
.030C  
SQ.FT.

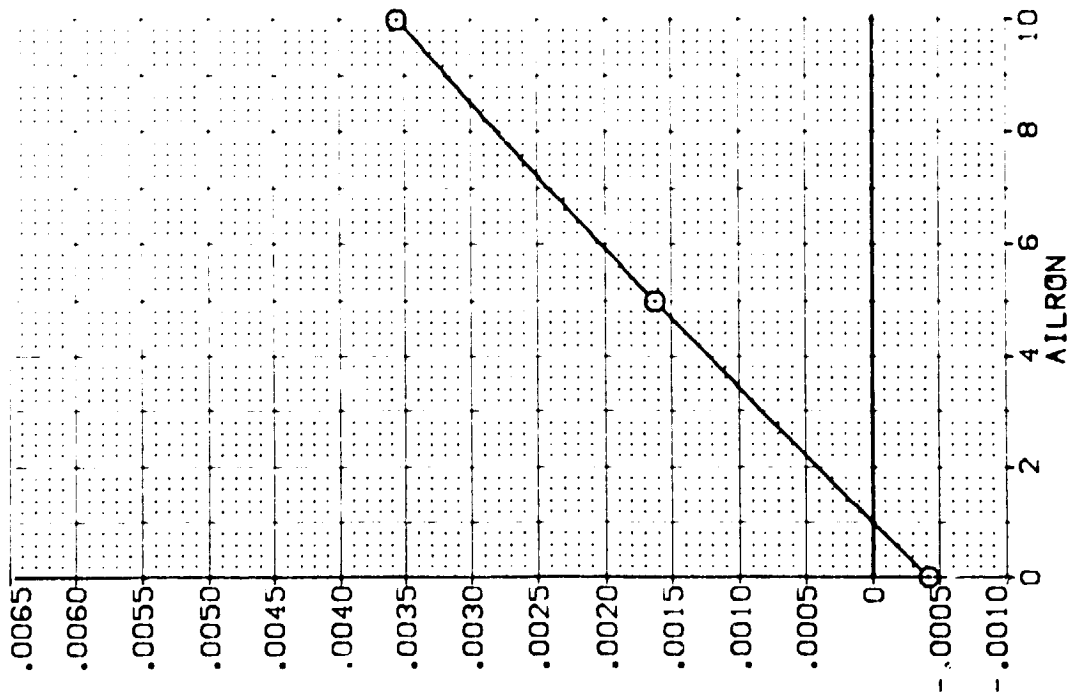
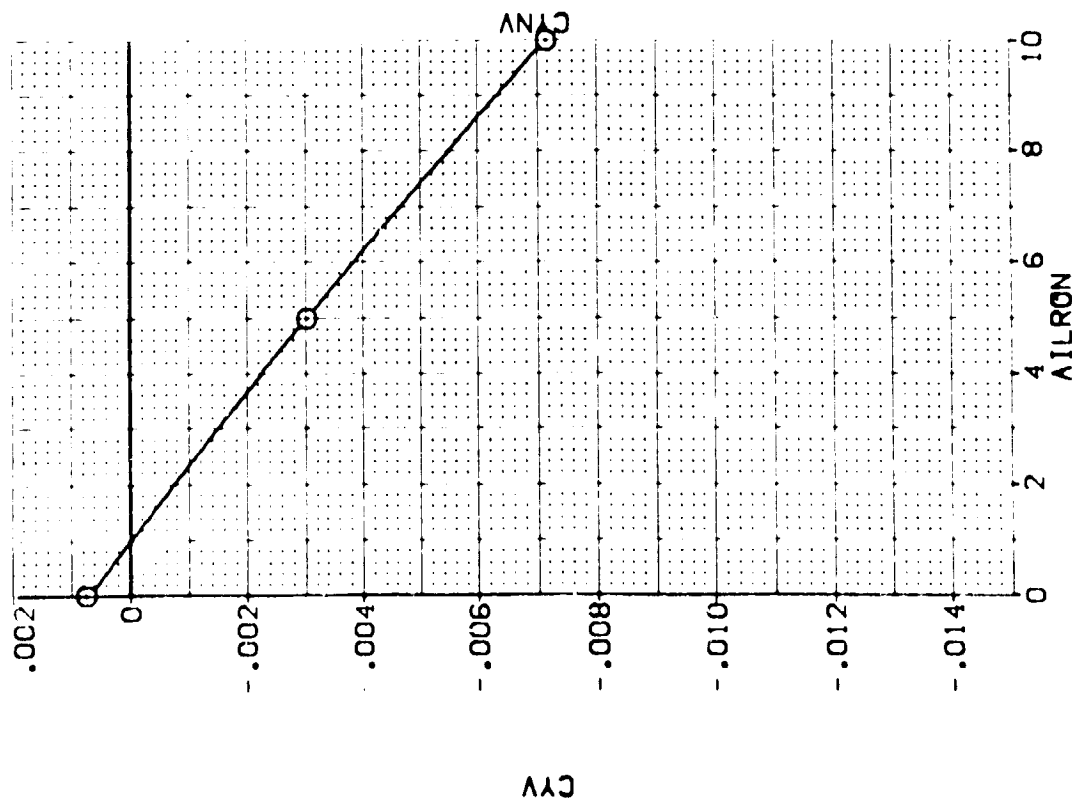


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	10.000	AILRON	DEJ005	SREF	2.4210
MACH	1.200	AILRON	DEJ005	LREF	14.2440
ELEVON	-10.000	AILRON	DEJ005	BREF	28.1004
SPDRK	75.000	AILRON	DEJ005	XMRP	32.3010
ELEV-L	-10.000	AILRON	DEJ005	YMRP	11.2500
ELEV-R	-10.000	AILRON	DEJ005	ZMRP	11.2500
		AILRON	DEJ005	SCALE	.0300

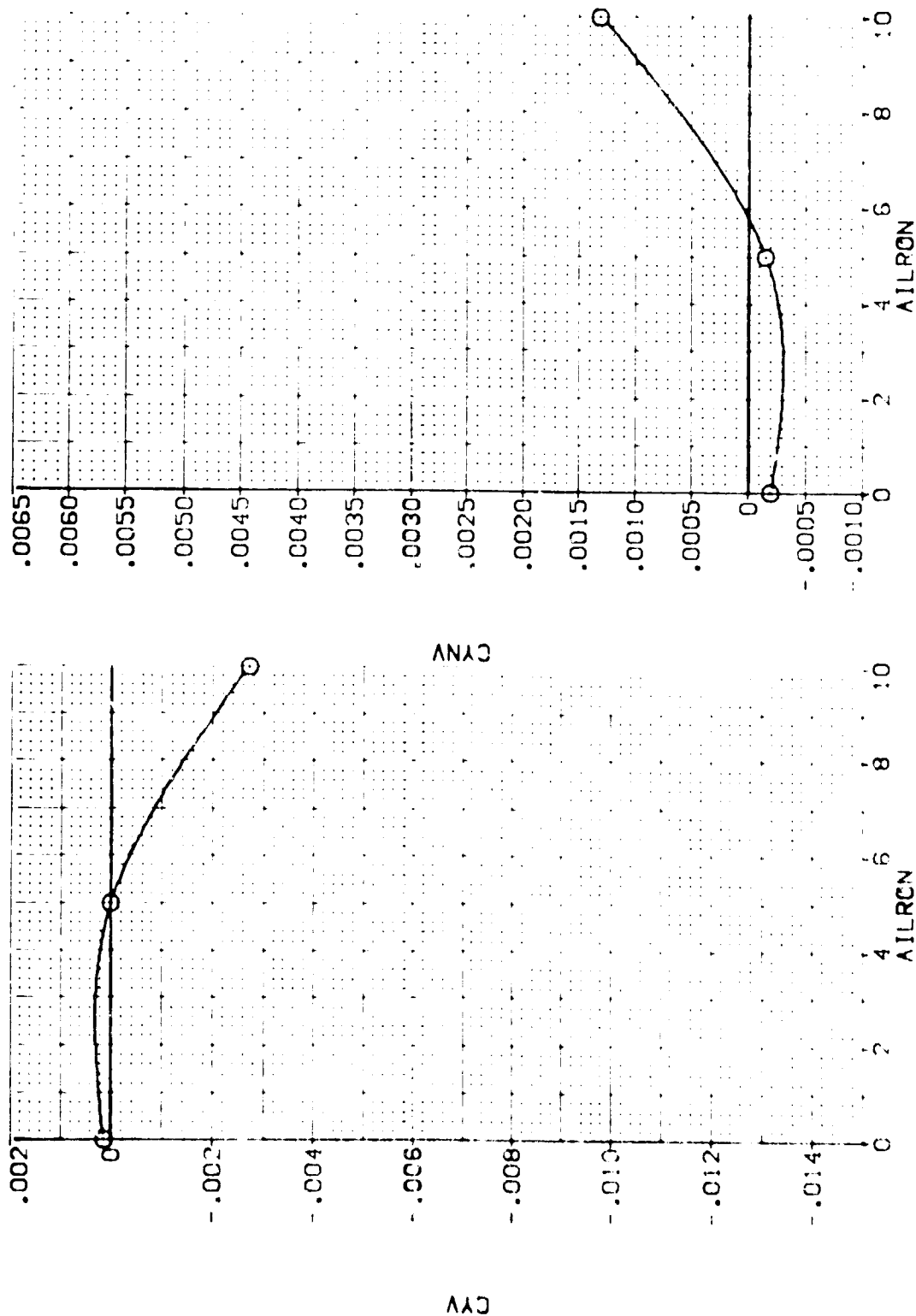


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ002)

SYMBOL  
O

ALPHA  
20.000

MACH  
ELEVON  
SPDBRK  
ELEV-L

PARAMETRIC VALUES  
BETA  
BOFLAP  
RUDDER  
ELEV-R

DATA SOURCE  
AILRON  
DEJ005

DATA SOURCE  
AILRON  
DEJ005

SRF  
LRF  
BREF  
XPRP  
YPRP  
SCALE

REFERENCE INFORMATION  
2.4210  
14.1140  
28.1004  
32.3010  
11.2500  
1.0300  
SQ.FT.  
SCALE

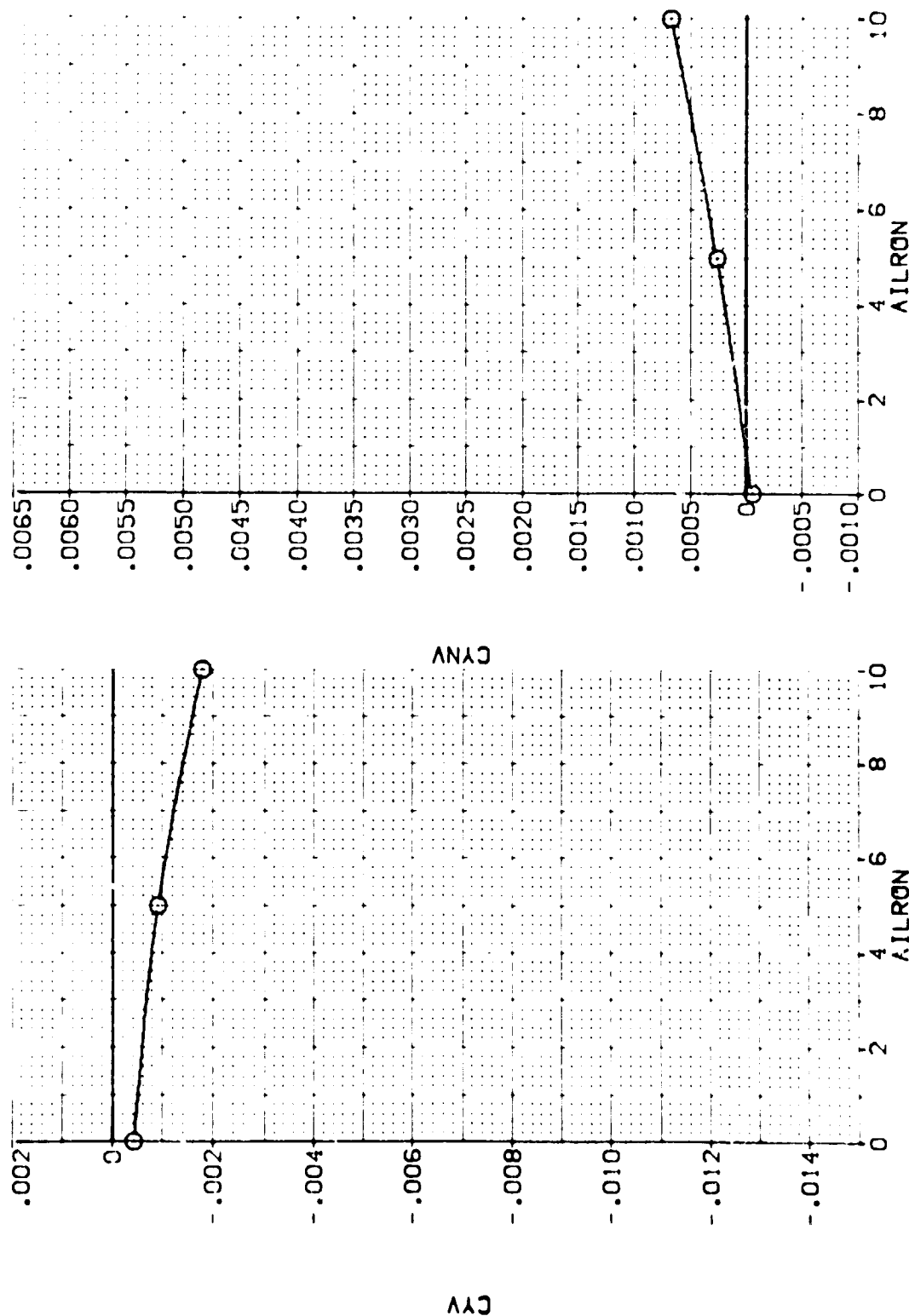


FIG. 36 EFFECT OF AILERON DEFLECTION ON VERTICAL TAIL

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL  
□  
◇

PARAMETRIC VALUES	
ALPHA	.000
MACH	.600
BETA	.000
ELEVON	.000
AILRON	.000
BDFLAP	25.000
ELEV-L	.000
ELEV-R	.000

REFERENCE INFORMATION	
SREF	2.4210
LREF	14.2440
BREF	28.1004
XREF	32.3010
YREF	.0070
ZREF	11.2500
SCALE	.0300

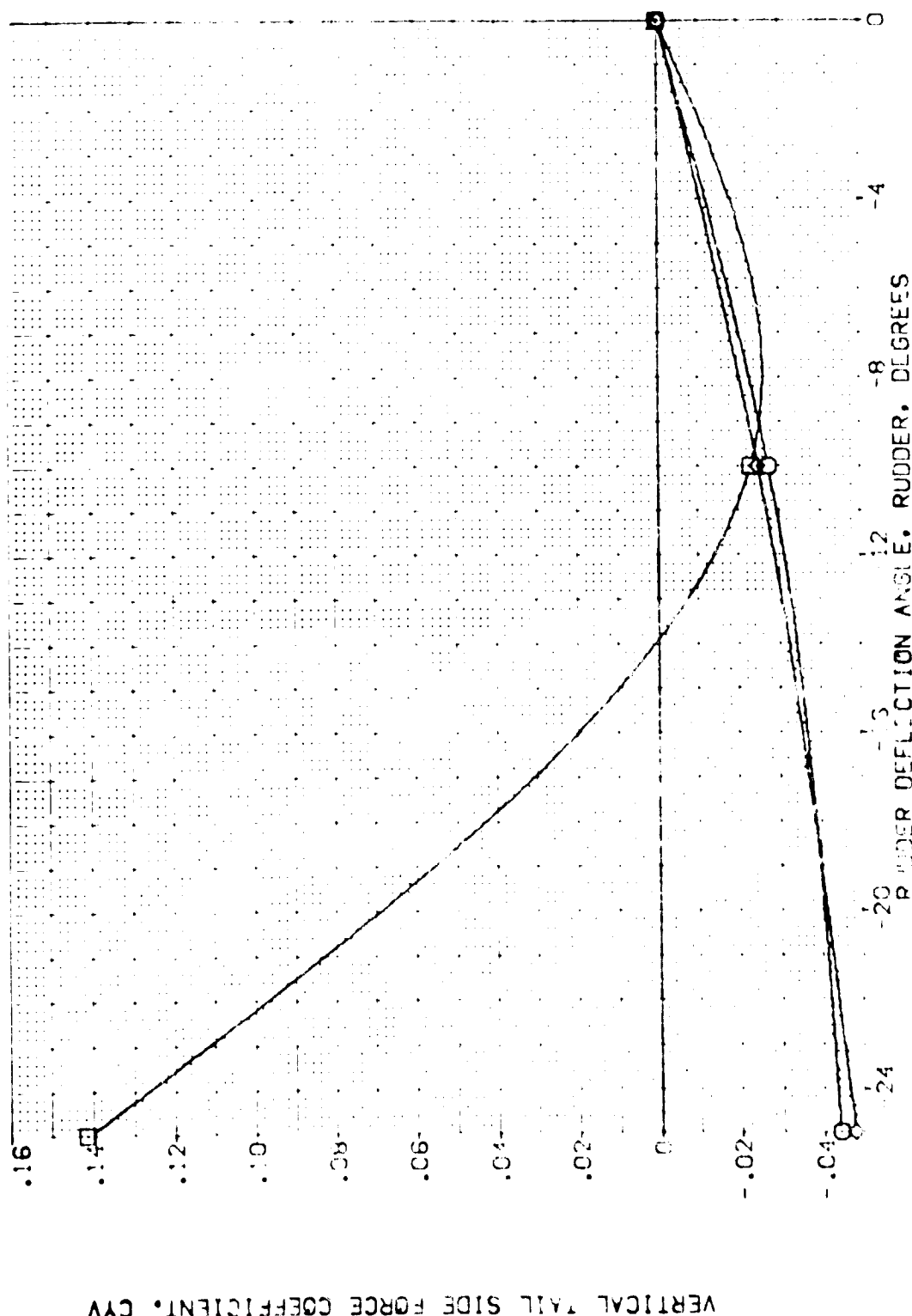


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES



(DEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

REFERENCE INFORMATION

SREF	2.4210	50. FT.
LREF	14.2440	
BREF	28.1004	
XMRP	32.3000	
YMRP	.0000	
ZMRP	11.2500	
SCALE	.0300	

PARAMETRIC VALUES

ALPHA	.000	BETA	.000
MACH	.000	AIRTON	.000
ELEVON	10.000	SPOBRK	25.000
BOFLAP	20.000	ELEV-R	.000
ELEV-L	.070		

SYMBOL

◇

□

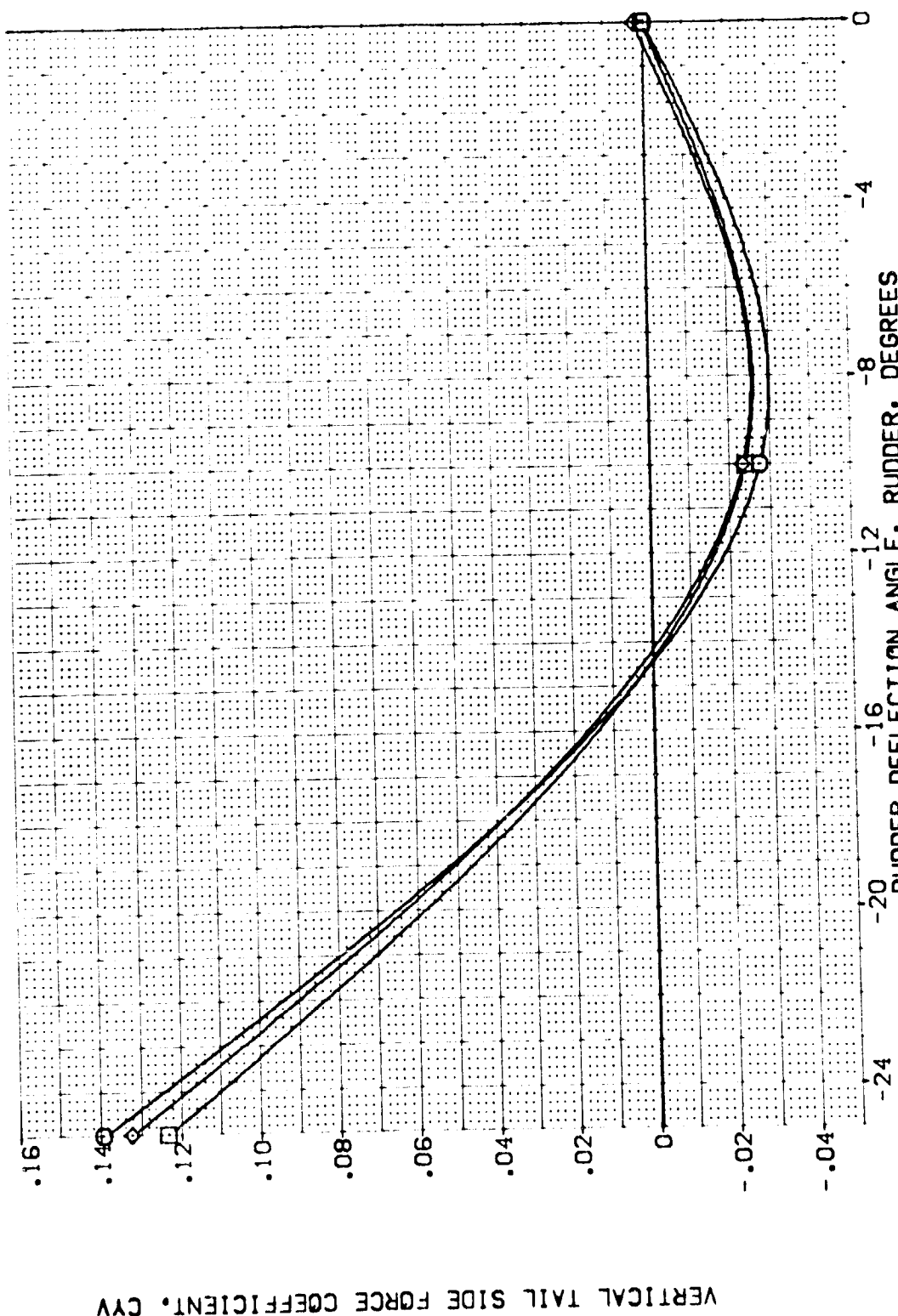


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL  
☐ ☐ ☐

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .900  
 ELEVON .000  
 BOFLAP -11.700  
 ELEV-L .000  
 BETA .000  
 AILRON .000  
 SPEEDK 25.000  
 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

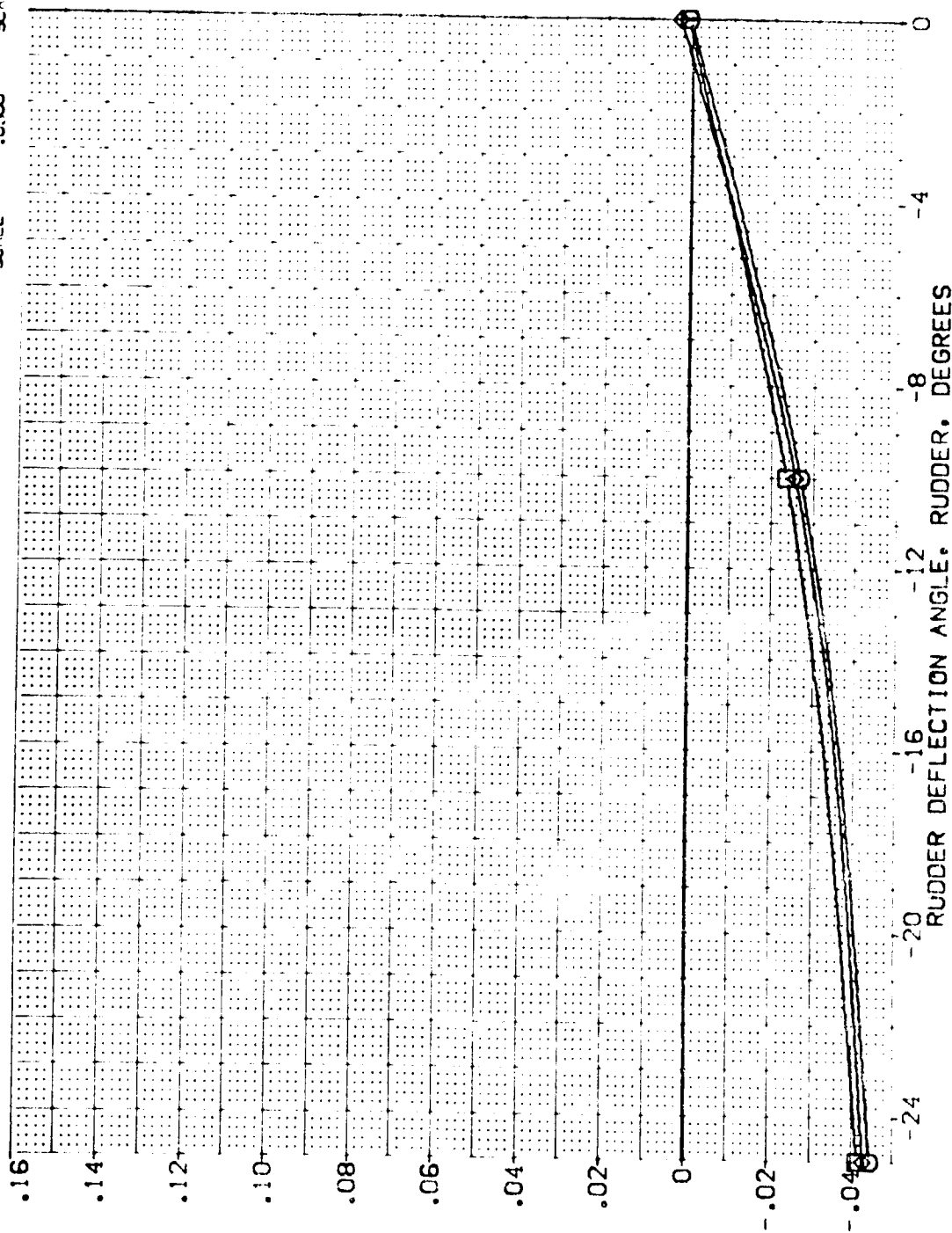


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

(DEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ○ □ ◇

PARAMETRIC VALUES  
 ALPHA .000  
 MACH 1.050  
 ELEVON .000  
 BOFLAP .000  
 ELEV-L .000  
 BETA .000  
 AIRRON .000  
 SPOBRK 25.000  
 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP 11.0000  
 ZMRP 11.2500  
 SCALE .0300

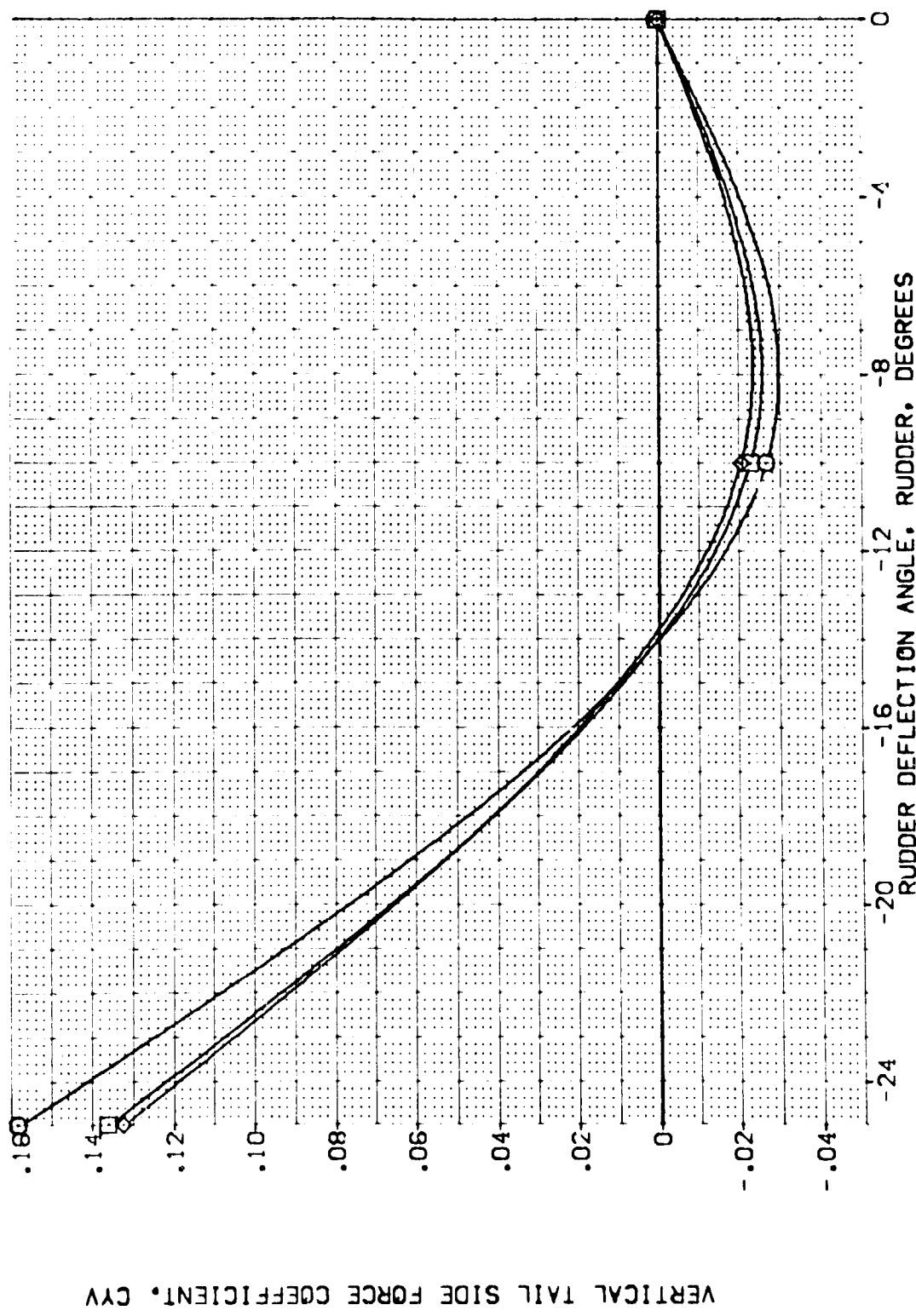


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL  
□  
◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BD FLAP  
ELEV-L

PARAMETRIC VALUES  
1.200 BETA  
.000 AILRON  
-11.700 SPEEDRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP .0000  
ZMRP 11.2500  
SCALE .0300

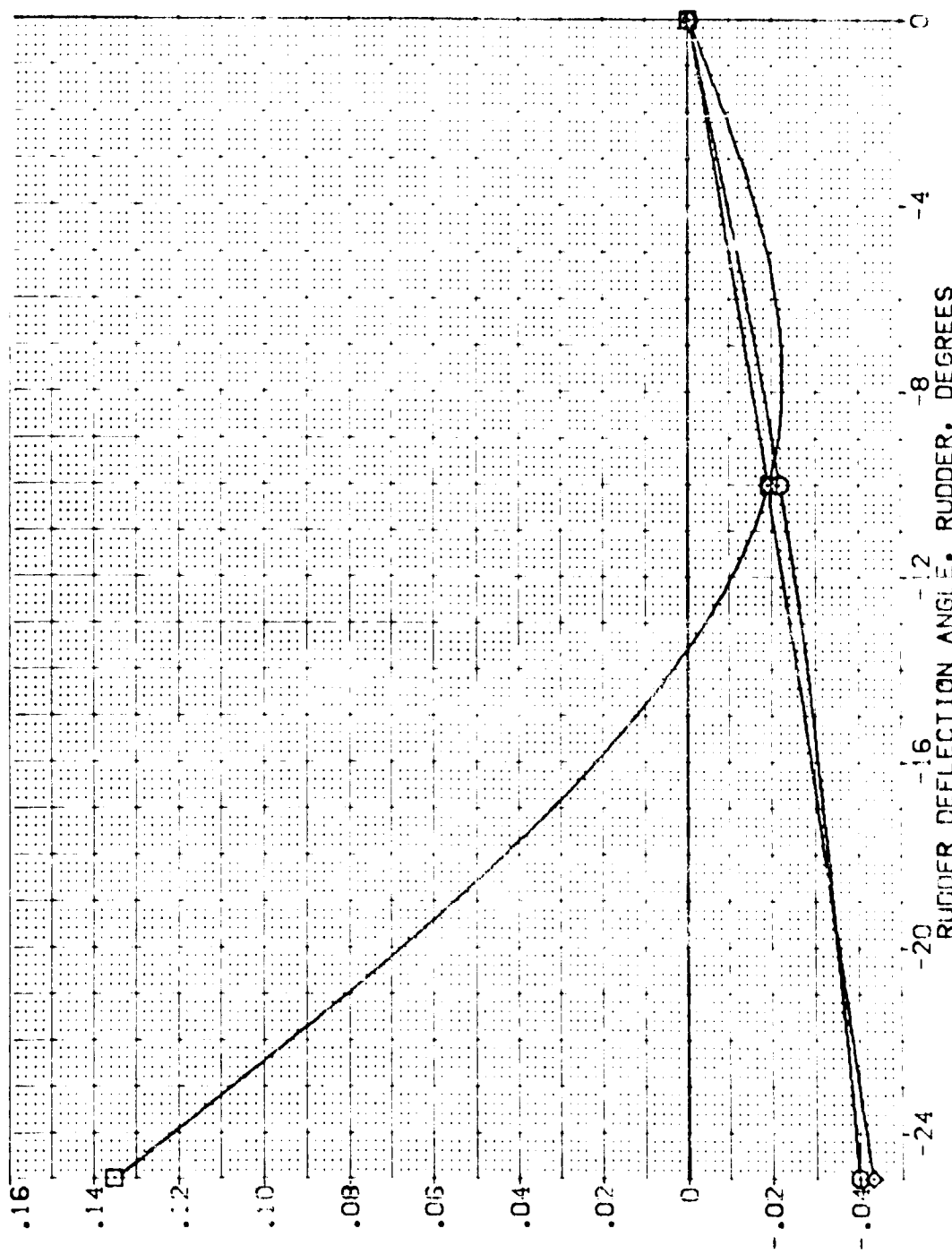


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES		REFERENCE INFORMATION	
	.000		.600	BETA	SREF	2.4210
	10.000	ELEVON	.000	AIRRON	LREF	14.2440
	20.000	BOFLAP	-11.700	SPOBRK	BREF	28.1004
		ELEV-L	.000	ELEV-R	XMRP	32.3010
					YMRP	.0000
					ZMRP	11.2500
					SCALE	.0300

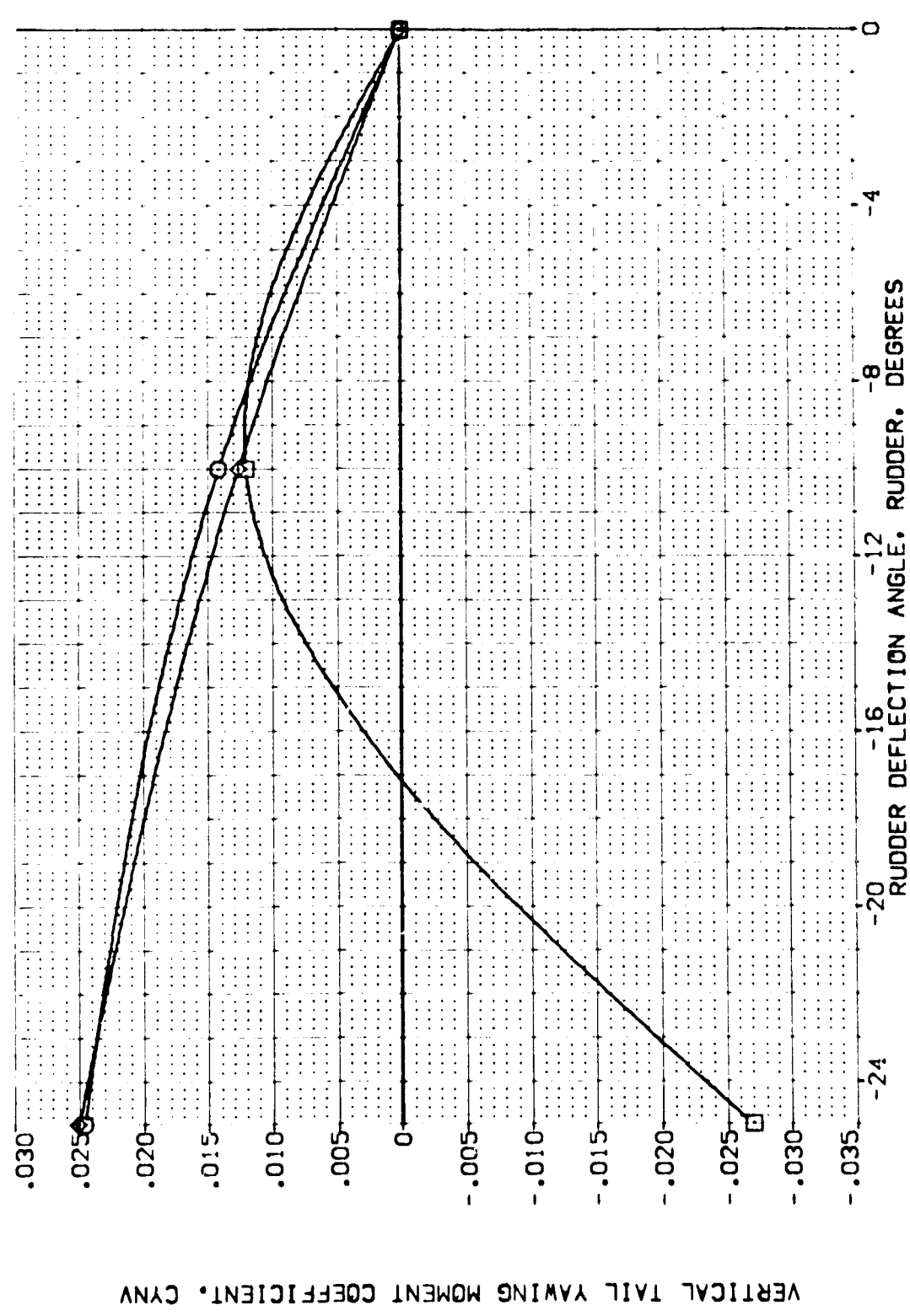


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

(DEJ032)

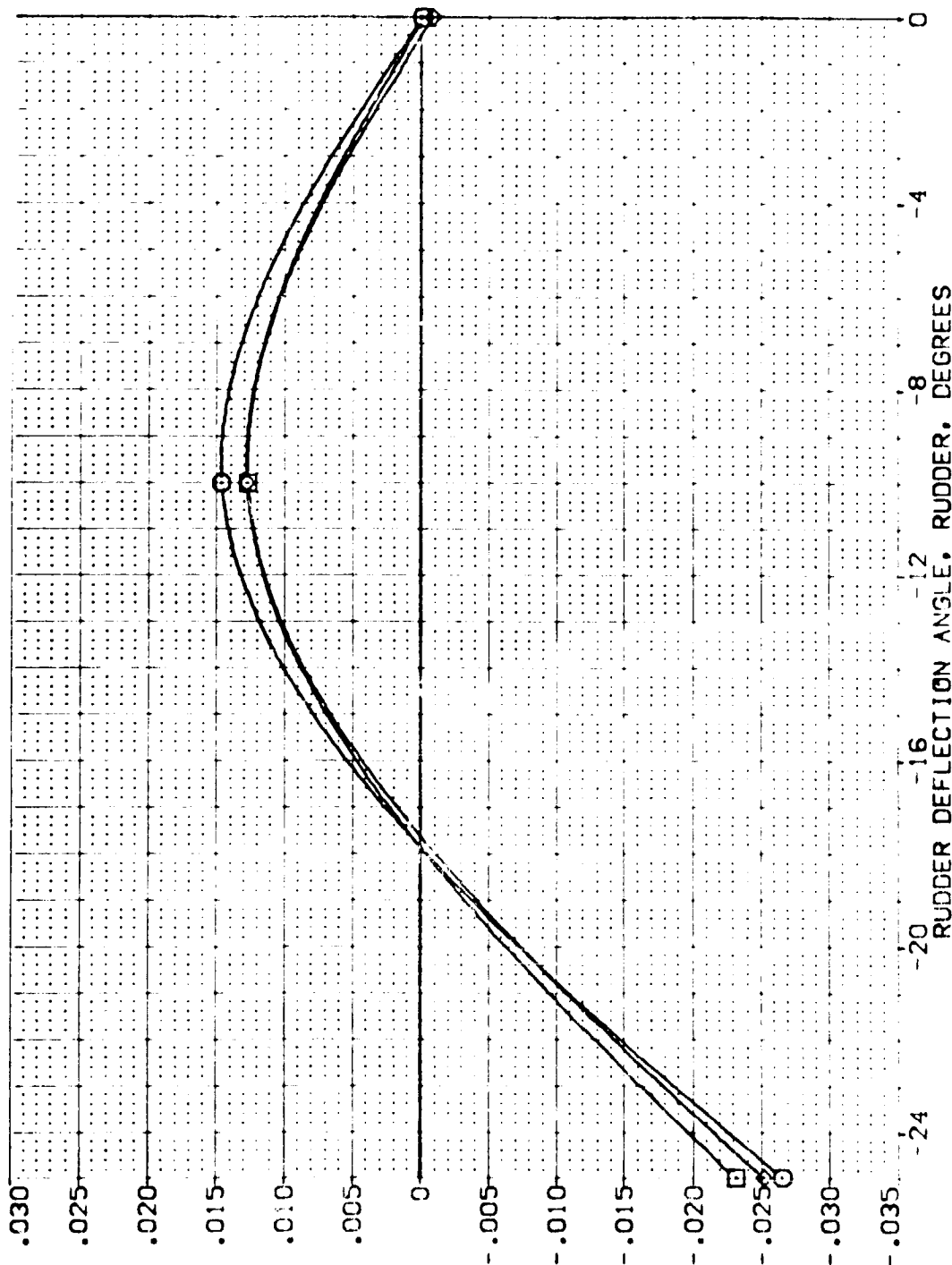
ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ○ □ ◇

ALPHA  
 .000  
 10.000  
 20.000

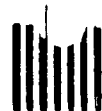
PARAMETRIC VALUES  
 MACH .800 BETA .000  
 ELEVON .000 AILRON .000  
 BOFLAP -11.700 SPEEDRK 25.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300



VERTICAL TAIL YAWING MOMENT COEFFICIENT, CYNV

FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL  
○  
◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
ELEV-L

PARAMETRIC VALUES  
.900 BETA  
.000 ALLRON  
-11.700 SPEEDRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP 11.2500 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

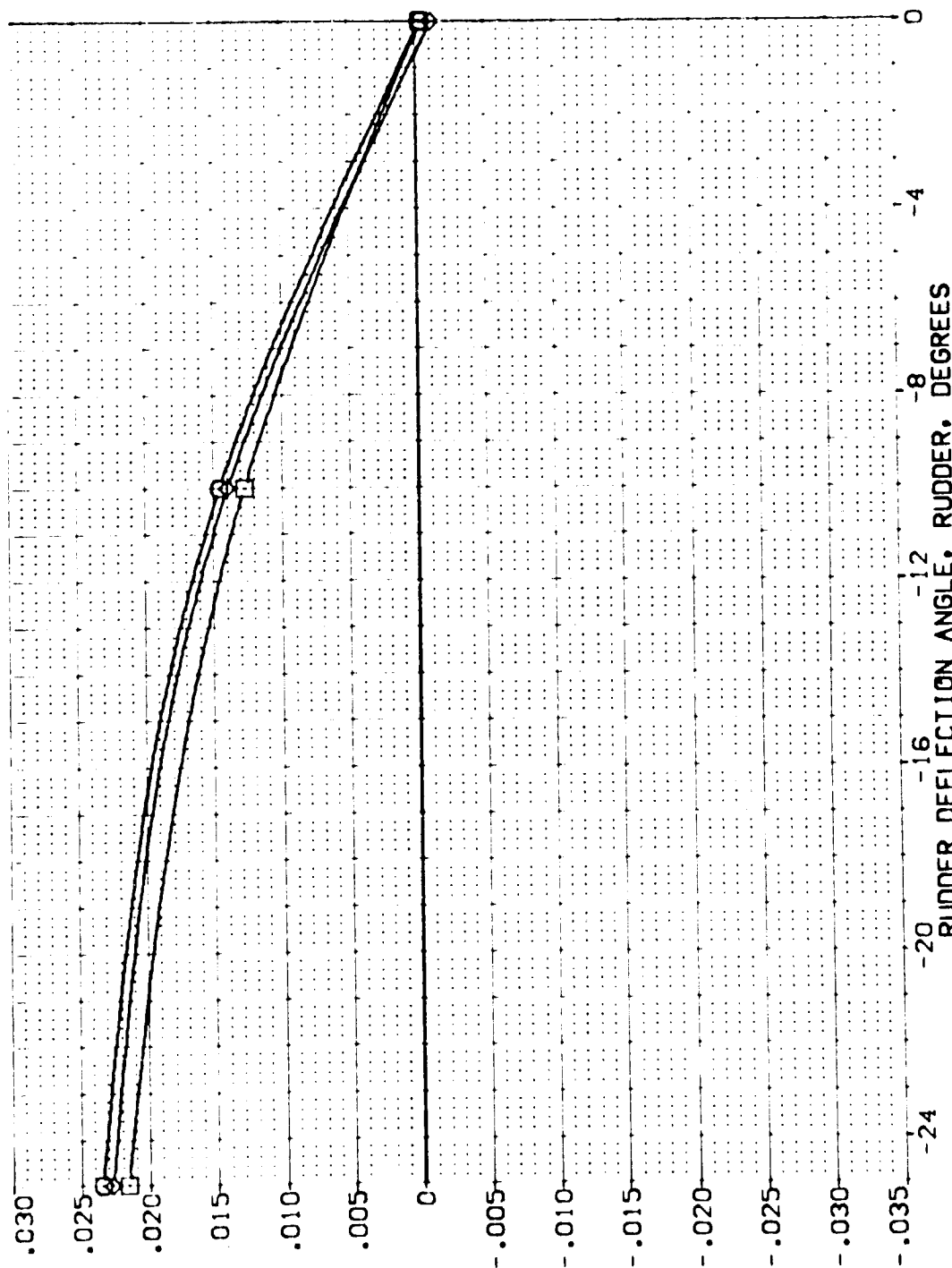


FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ032)

SYMBOL

○ □ ◇

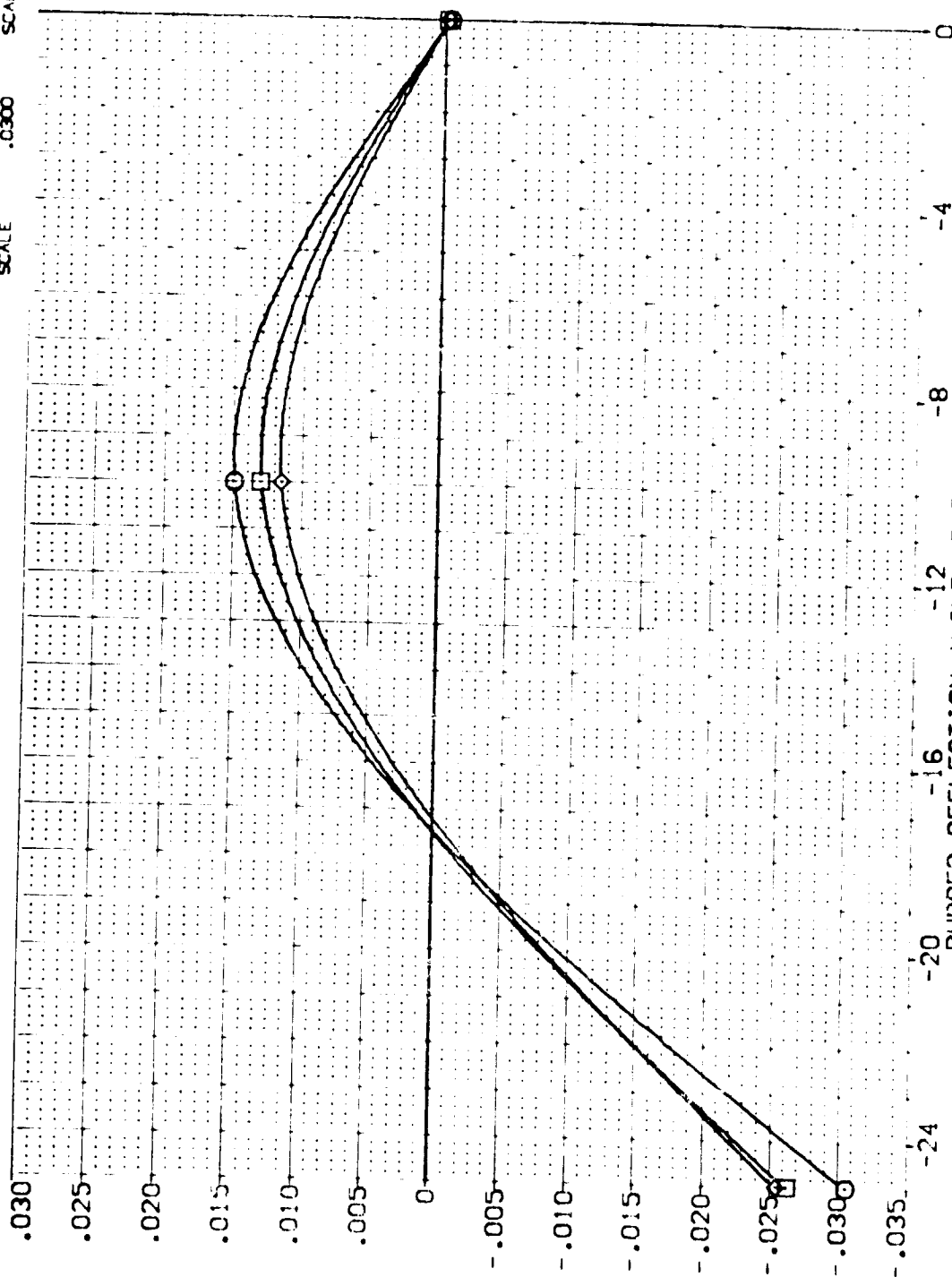
ALPHA

MACH  
ELEVON  
EDFLAP  
ELEV-L

PARAMETRIC VALUES

1.050 BETA  
.000 AILRON  
-11.700 SPEEDRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XPRP 32.3010 IN.  
YPRP .0000 IN.  
ZPRP 11.2500 IN.  
SCALE



VERTICAL TAIL YAWING MOMENT COEFFICIENT, CYN

RUDDER DEFLECTION ANGLE, DEGREES

FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES



(DEJ032)

NOM. RN/L

V

B C M F W1

QAS3A

ARC 11-747

11-747

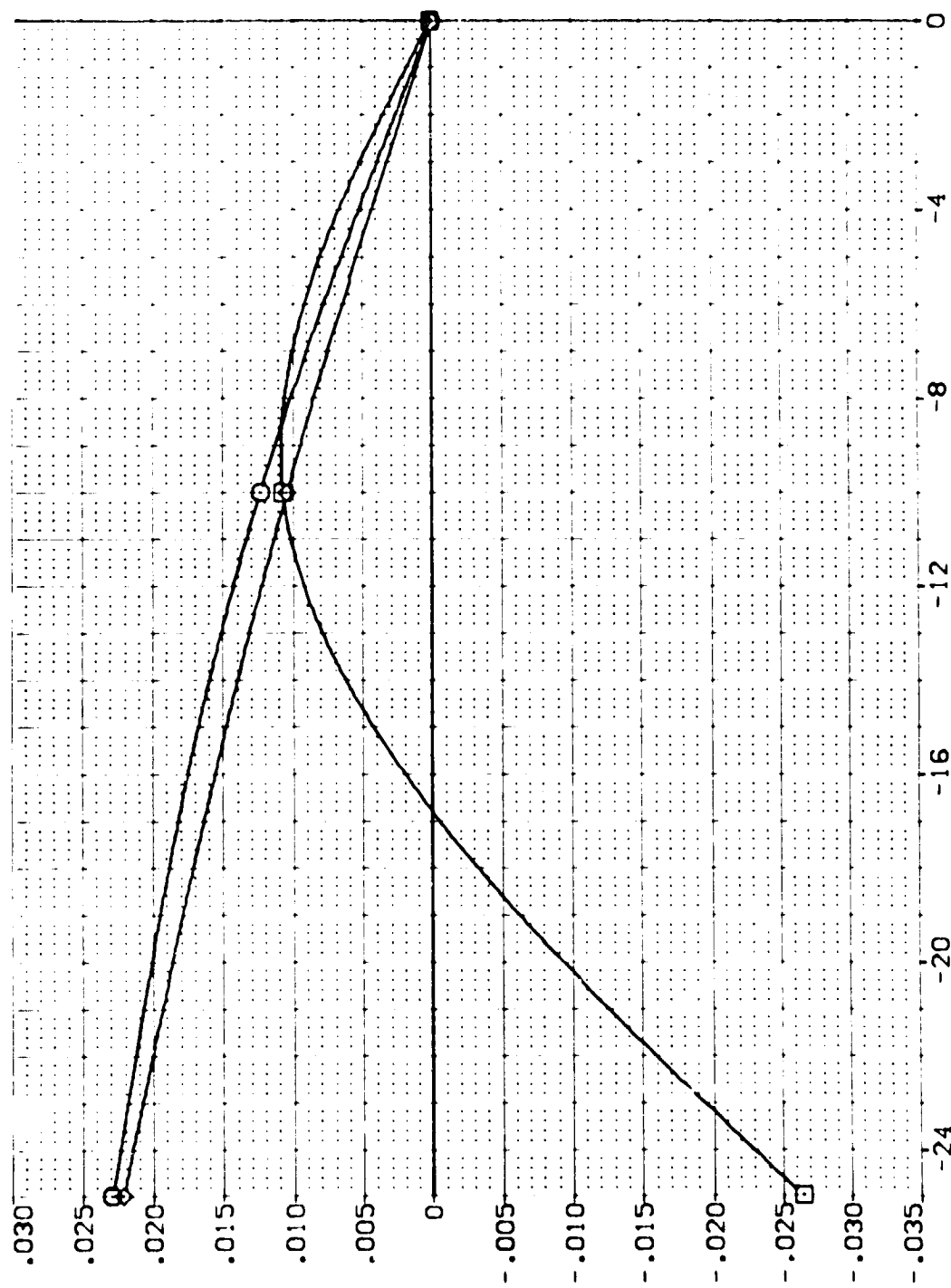
SYMBOL

○ □ ◇

PARAMETRIC VALUES

MACH 1.200 BETA .000  
ELEVON .000 AILRON .000  
BOFLAP -11.700 SPEEDBRK 25.000  
ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.244C IN.  
BREF 28.1004 IN.  
XPRP 32.301C IN.  
YPRP .000C IN.  
ZPRP 11.250C IN.  
SCALE .0300



VERTICAL TAIL YAWING MOMENT COEFFICIENT, CYNV

FIG. 37 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 25 DEGREES

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPEEDBRAK	REFERENCE INFORMATION
(AE012)	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AE013)	ARC 11-747 0A53A B C M F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(AE014)	ARC 11-747 0A53A B C M F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YPRP 32.3010 IN.
						ZPRP .0000 IN.
						SCALE 11.2500
						.0300

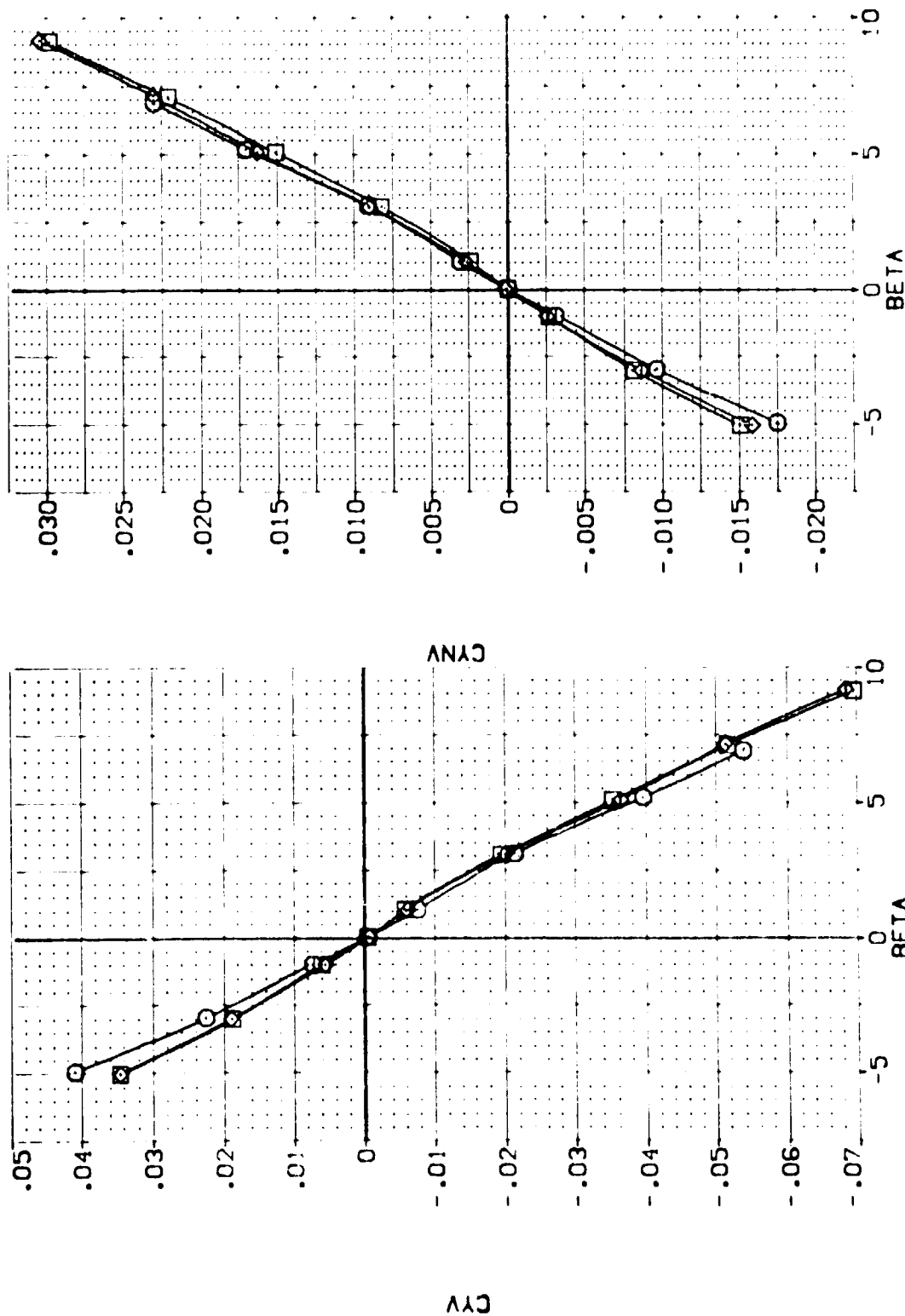


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(A)MAC<sub>ref</sub> = .60



DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 [AEJ012] □ ARC 11-747 0A53A B C H F V V  
 [AEJ013] ◇ ARC 11-747 0A53A B C H F V V  
 [AEJ014] ◇ ARC 11-747 0A53A B C H F V V

NON: RV/L  
 NON: RV/L  
 NON: RV/L

ALPHA RUDDER SDF LAP SDF BRK  
 .000 .000 -11.700 25.000  
 10.000 .000 -11.700 25.000  
 20.000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.42:0 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.30:0 IN.  
 YMRP 0.0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

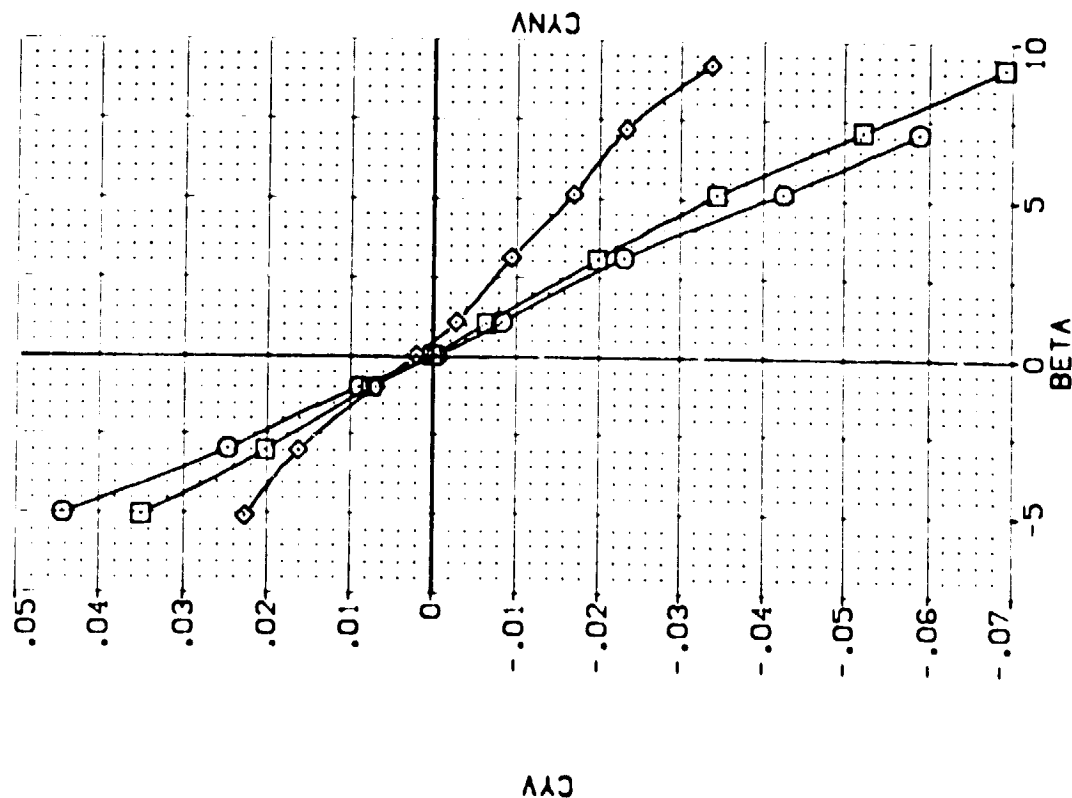


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(B)MAC = .80

DATA SET SYMBOL: {AEJ012} {AEJ013} {AEJ014}

CONFIGURATION DESCRIPTION: ARC 11-747 OAS3A B C M F V1 V NOM: RNVL ARC 11-747 OAS3A B C M F V1 V NOM: RNVL ARC 11-747 OAS3A B C M F V1 V NOM: RNVL

RUDDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

SPOBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.FT. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP 32.0000 IN. ZMRP 11.2500 IN. SCALE .0300

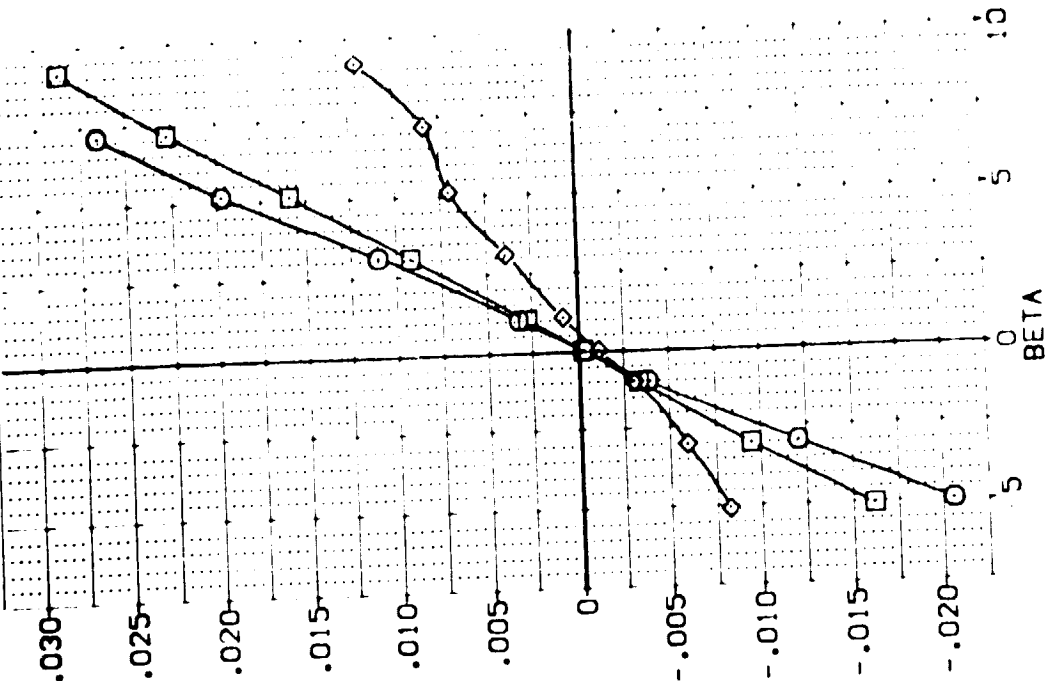
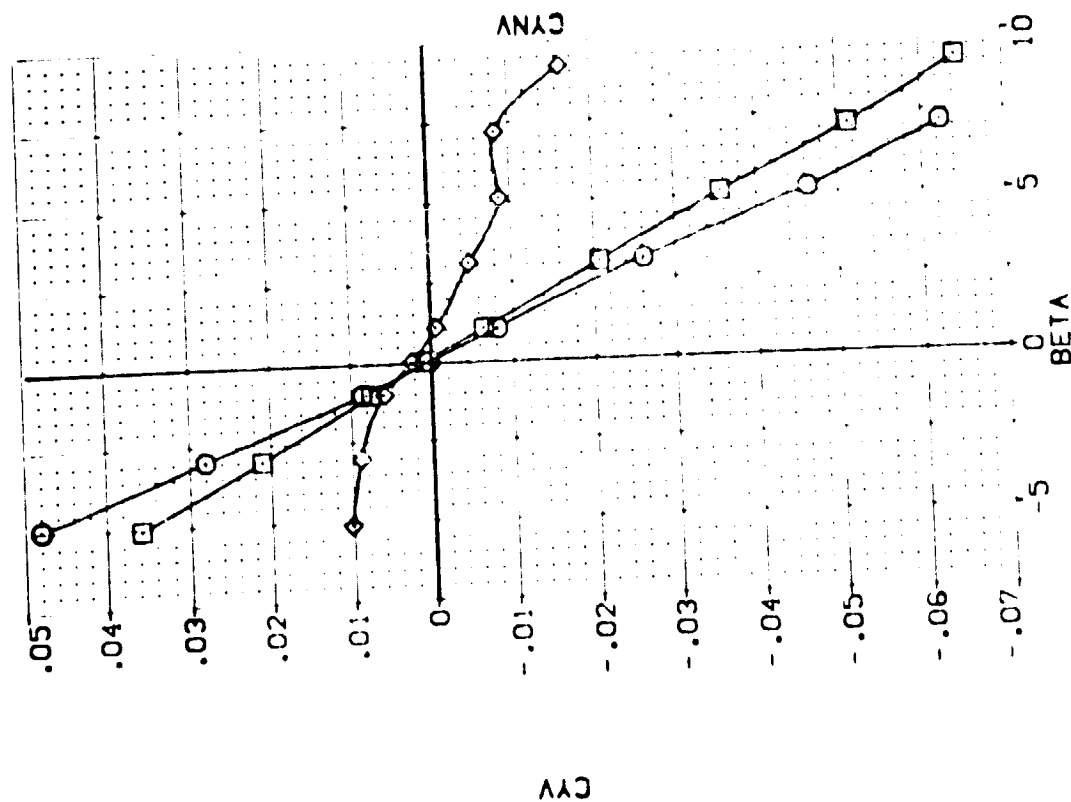


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP SPEEDBRAKE = 25 DEGREES

(C)MAC = .90

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(AERO12)	○	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AERO13)	□	ARC 11-747 CAS3A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440
(AERO14)	◇	ARC 11-747 CAS3A B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1304
							XREF 32.3010
							YREF 0.0000
							ZREF 11.2500
							SCALE .0300

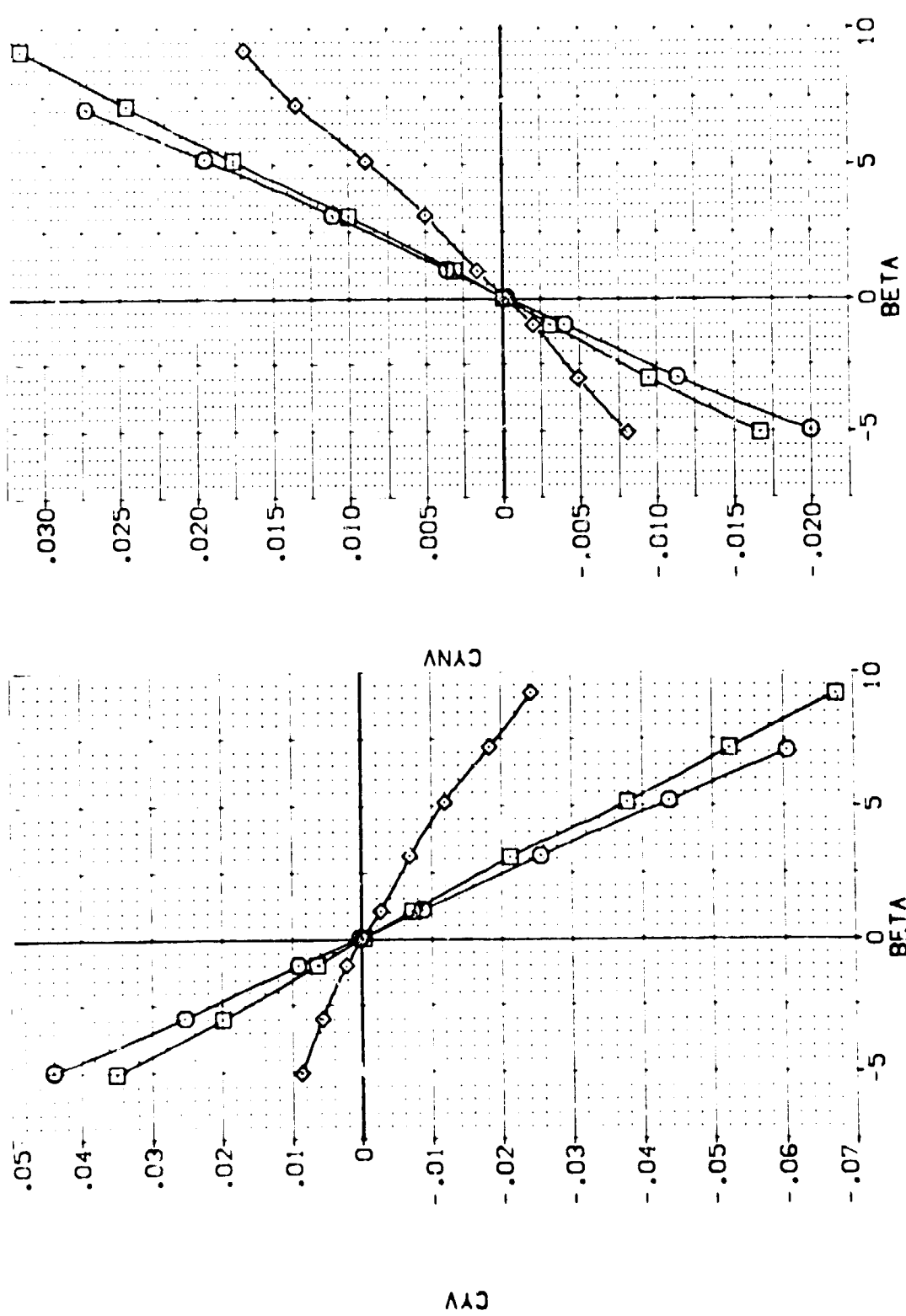


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(COMAC) = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION
(AEJ012)	ARC 11-747 OAS3A B C M F VI V
(AEJ013)	ARC 11-747 OAS3A B C M F VI V
(AEJ014)	ARC 11-747 OAS3A B C M F VI V

ALPHA RUDDER BDF LAP SPOBRK

ALPHA	RUDDER	BDF LAP	SPOBRK
.000	.000	-11.700	25.000
10.000	.000	-11.700	25.000
20.000	.000	-11.700	25.000

REFERENCE INFORMATION

SPREF	2.4210	SD.FT.
LRREF <td>14.2440</td> <td>IN.</td>	14.2440	IN.
BRREF <td>28.1004</td> <td>IN.</td>	28.1004	IN.
XMRP <td>32.3010</td> <td>IN.</td>	32.3010	IN.
YMRP <td>.0000</td> <td>IN.</td>	.0000	IN.
ZMRP <td>11.2500</td> <td>IN.</td>	11.2500	IN.
SCALE <td>11.0000</td> <td>SCALE</td>	11.0000	SCALE

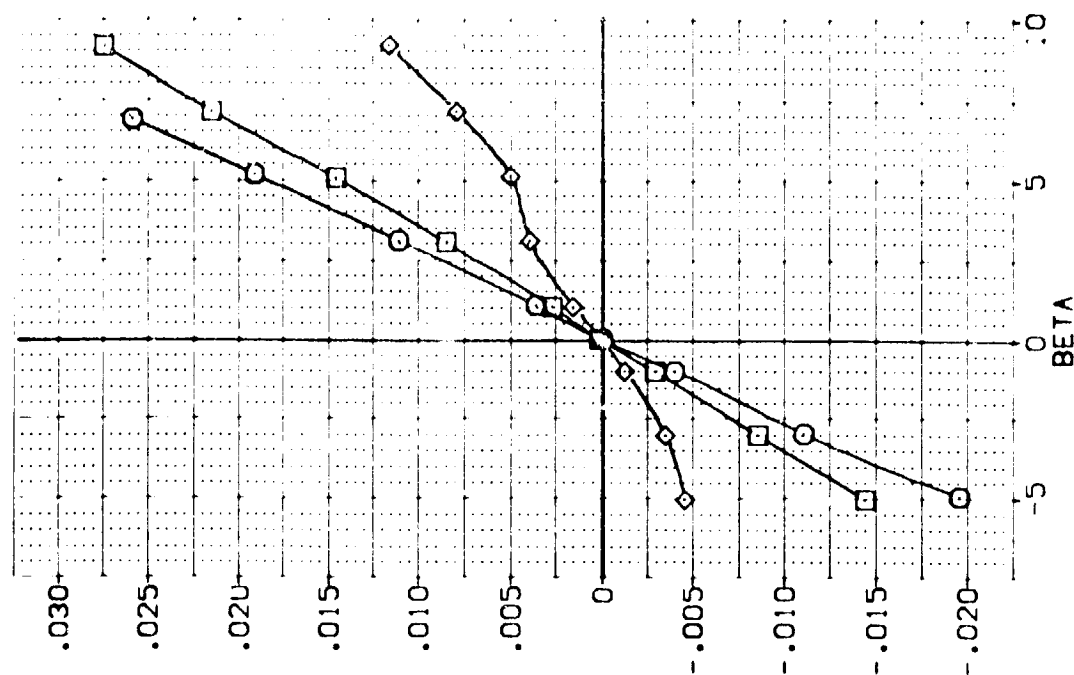
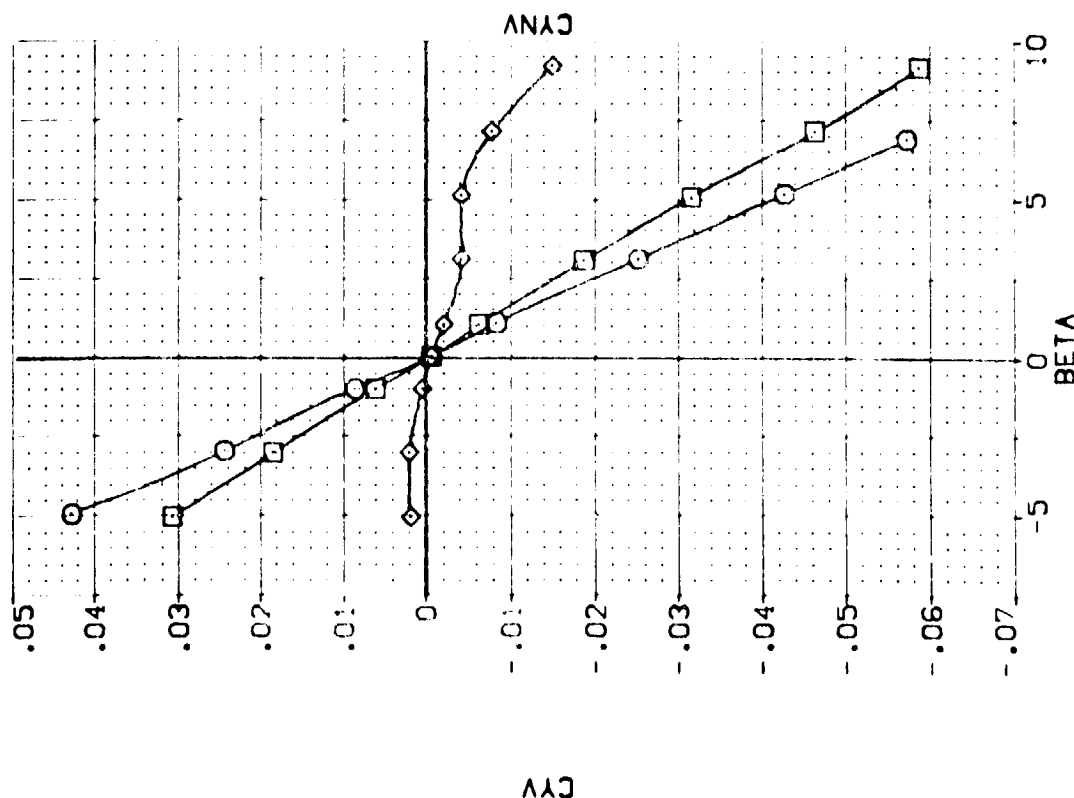


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(E)MAC = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOILER	REFERENCE INFORMATION	
[AEJ008]	ARC 11-747 BA53A B C M F VI V	0.00	-10.000	-11.700	25.000	SREF	2.4210 SQ.FT.
[AEJ009]	ARC 11-747 BA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF	14.2440
[AEJ010]	ARC 11-747 BA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF	28.1004
[AEJ011]	ARC 11-747 BA53A B C M F VI V					XREF	32.3010
						YREF	0.0000
						ZREF	11.2500
						SCALE	0.0000

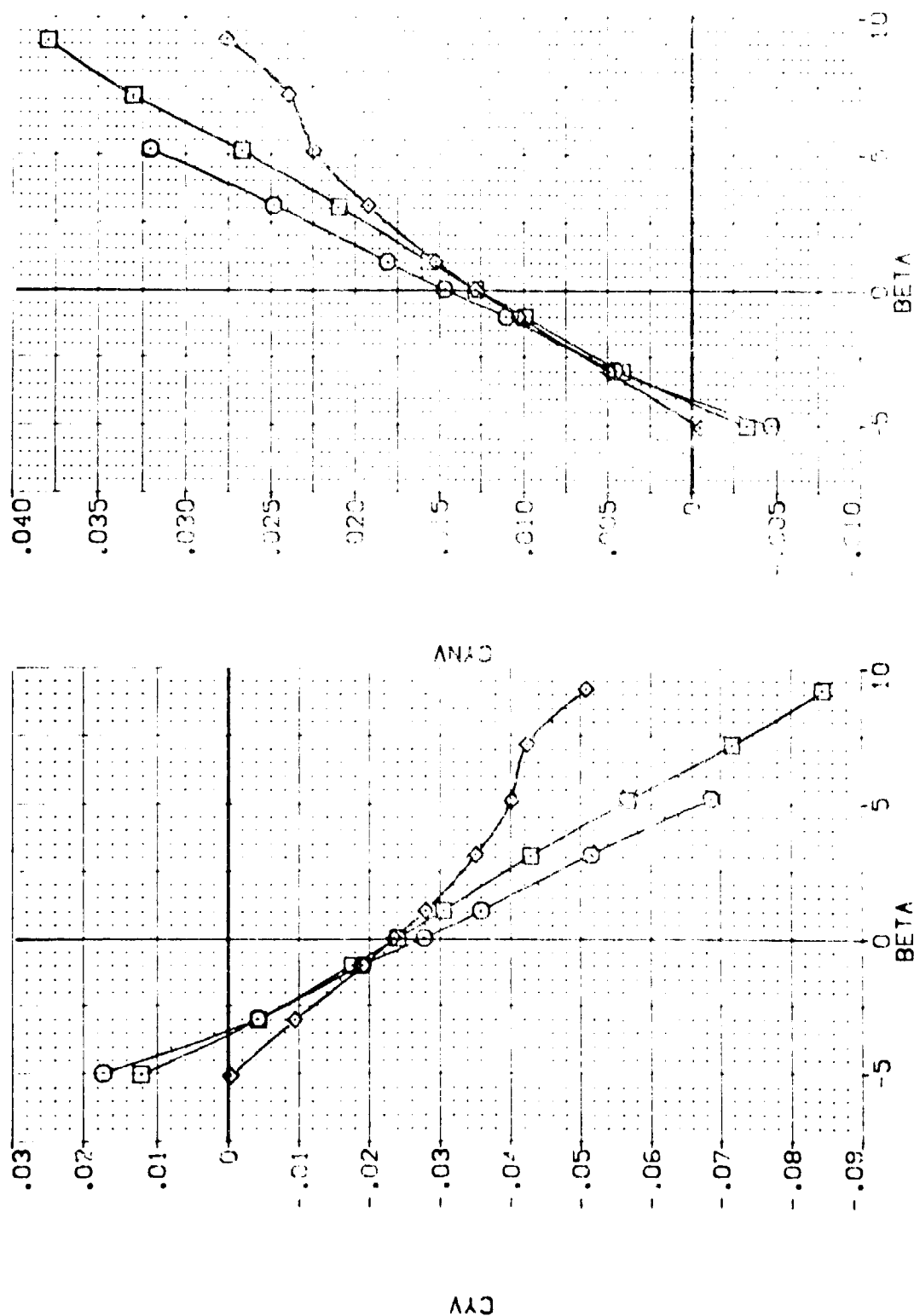


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(B)MAC = .80



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBK	REFERENCE INFORMATION
(AEJ029)	ARC 11-747 D153A B C M F V1	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(AEJ030)	ARC 11-747 D153A B C M F V1	10.000	-10.000	-11.700	25.000	LREF 14.2440
(AEJ031)	ARC 11-747 D153A B C M F V1	20.000	-10.000	-11.700	25.000	BREF 28.1004
						YREF 32.3010
						ZREF 11.2500
						SCALE 11.0000

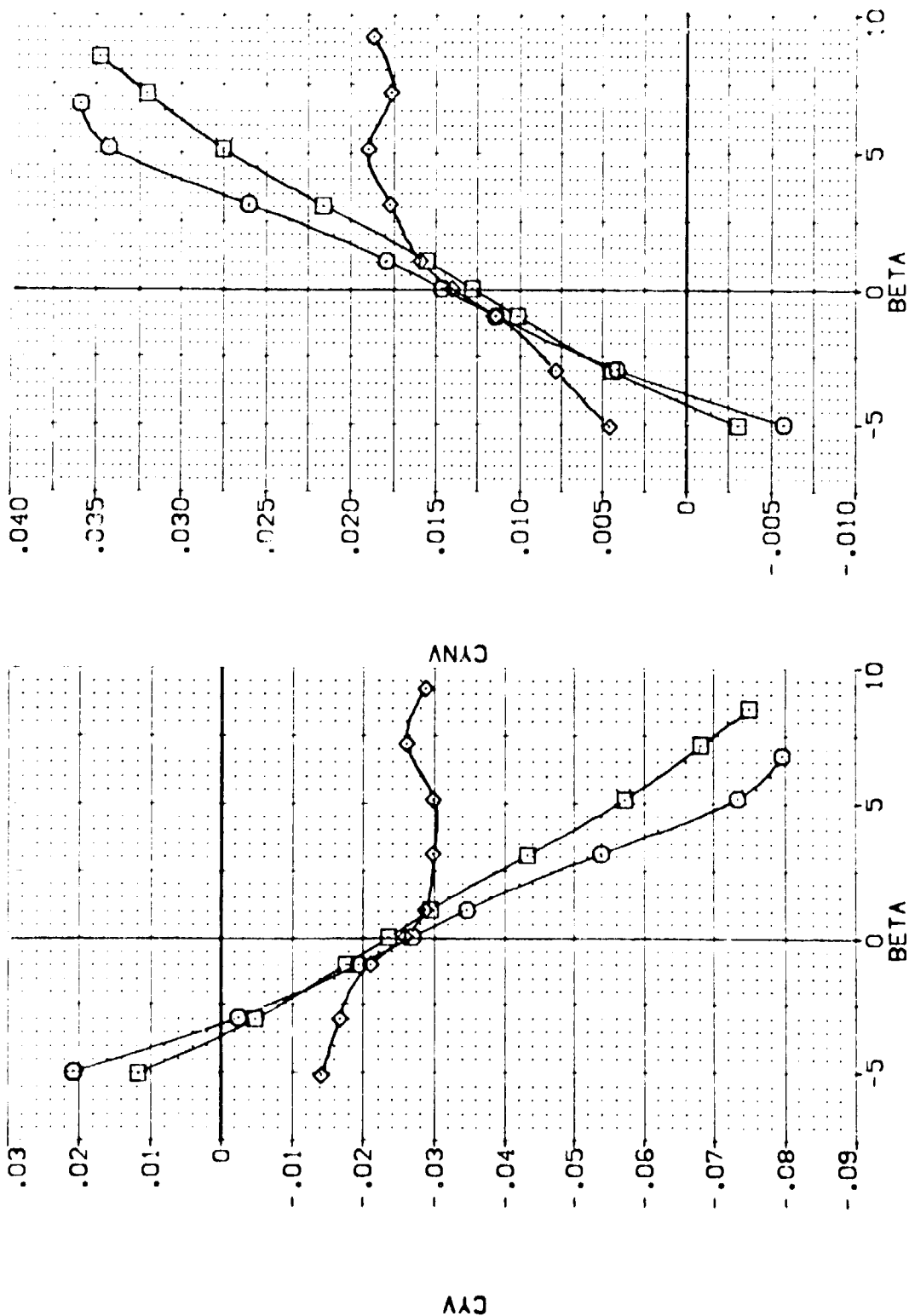


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 0A53A B C M F VI V

ARC 11-747 0A53A B C M F VI V

ARC 11-747 0A53A B C M F VI V

NON: RVUL

NON: RVUL

NON: RVUL

ALPHA R ORDER BDF LAP SPOBOK

000 -10.000 -11.700 25.000

10.000 -10.000 -11.700 25.000

20.000 -10.000 -11.700 25.000

REFERENCE INFORMATION

SREF 2.4210 SQ. FT.

LREF 14.2240

BREF 28.1004

XMRP 32.3010

YMRP 11.2500

ZMRP 0.0000

SCALE 0.0300

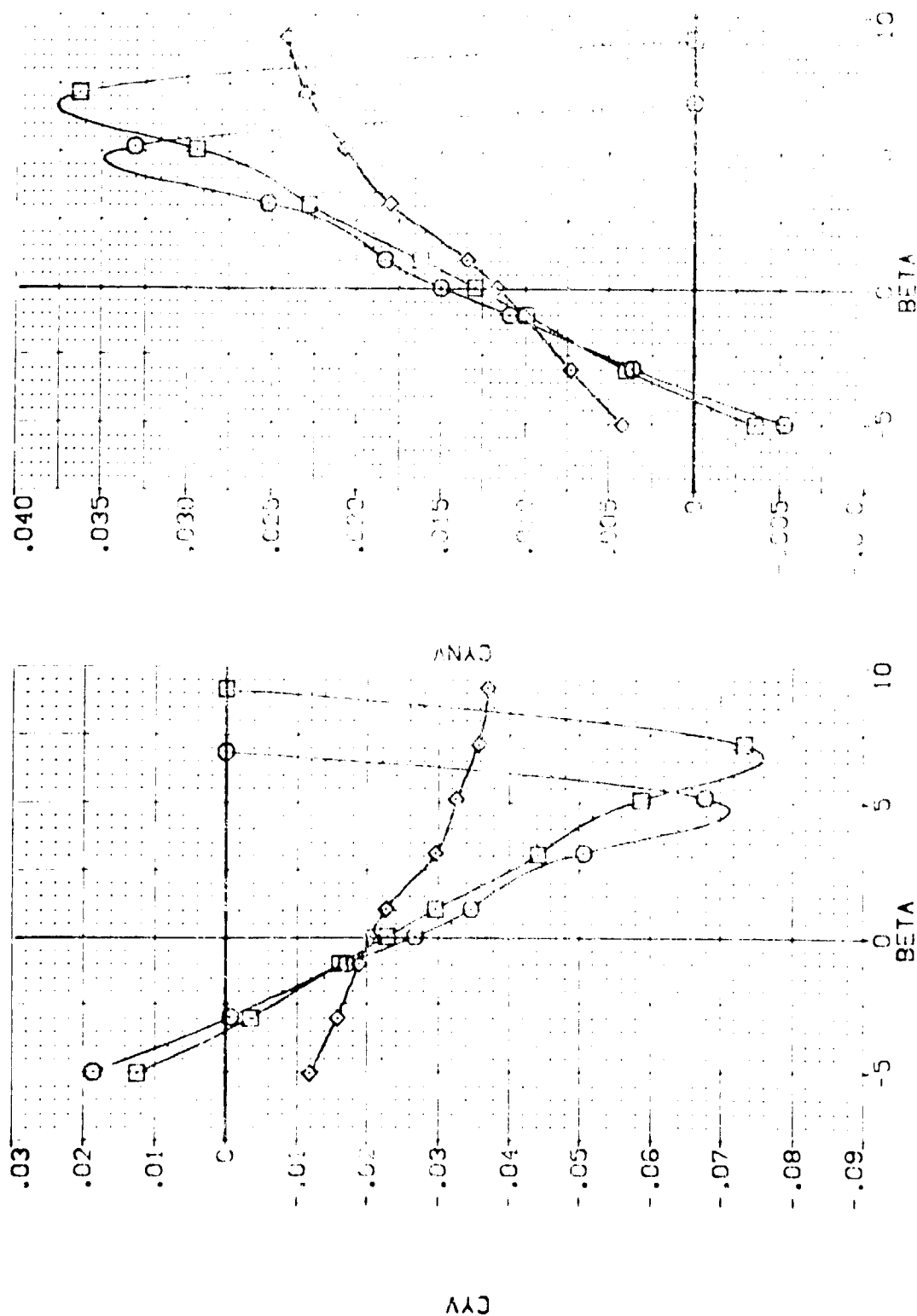


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(C)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPEED	REFERENCE INFORMATION
[AEJ029]	ARC 11-747 CAS3A B C H F VI V	10.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[AEJ030]	ARC 11-747 CAS3A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2140
[AEJ031]	ARC 11-747 CAS3A B C H F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1000
						XREF 32.3010
						YREF 0.0000
						ZREF 11.2500
						SCALE 11.0300

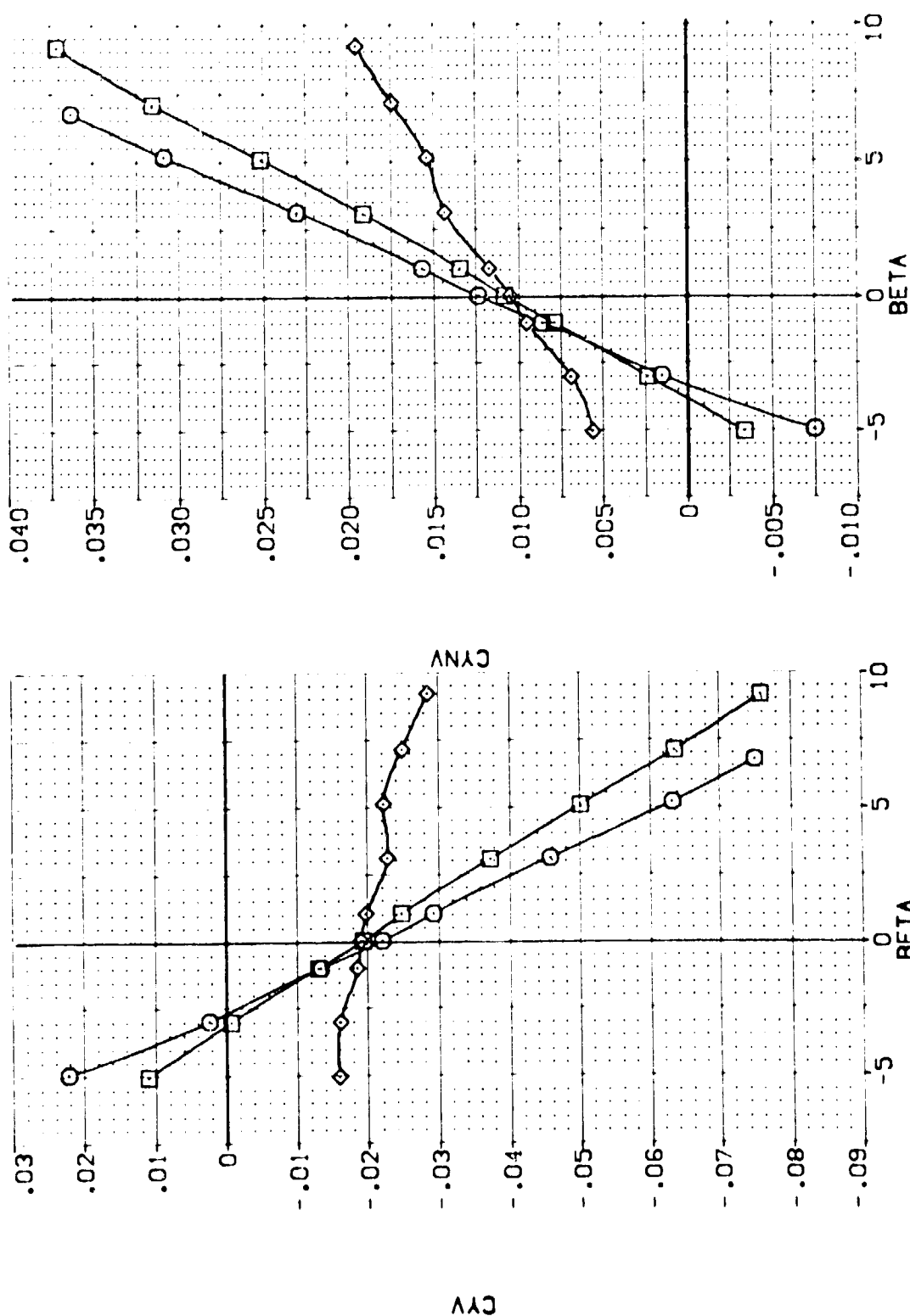


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(S)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDLAP	SPEEDBRK	REFERENCE INFORMATION
[AEJ002]	ARC 11-747 QAS3A B C H F V	.000	-25.000	-11.700	25.000	SREF 2.421C SQ.FT.
[AEJ003]	ARC 11-747 QAS3A B C H F V	10.000	-25.000	-11.700	25.000	LREF 14.244C
[AEJ004]	ARC 11-747 QAS3A B C H F V	20.000	-25.000	-11.700	25.000	BREF 28.100C
						XPRD 32.301C
						YPRD .000C
						ZPRD 11.250C
						SCALE .0300

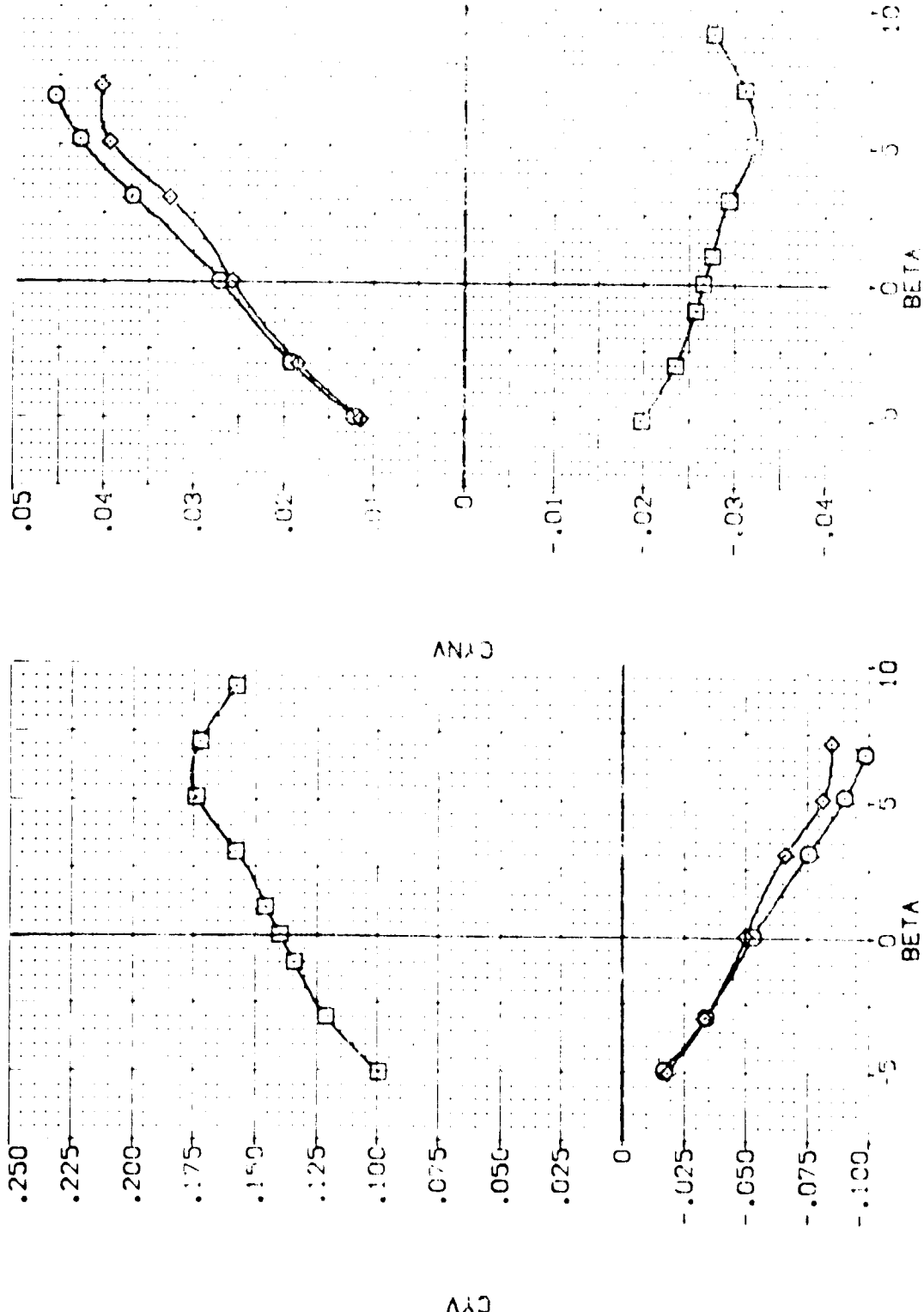


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPEEDBRAKE	REFERENCE INFORMATION
(AEJ032)	ARC 11-747 D-53A B C M E V	0.000	-25.000	-11.700	25.000	SPKE 2.4213 SQ. FT.
(AEJ033)	ARC 11-747 D-53A B C M E V	10.000	-25.000	-11.700	25.000	SPKE 14.2445 SQ. FT.
(AEJ034)	ARC 11-747 D-53A B C M E V	20.000	-25.000	-11.700	25.000	SPKE 28.1004 SQ. FT.
						YMGD 32.1000
						YMGD 11.2500
						SCALE .0300

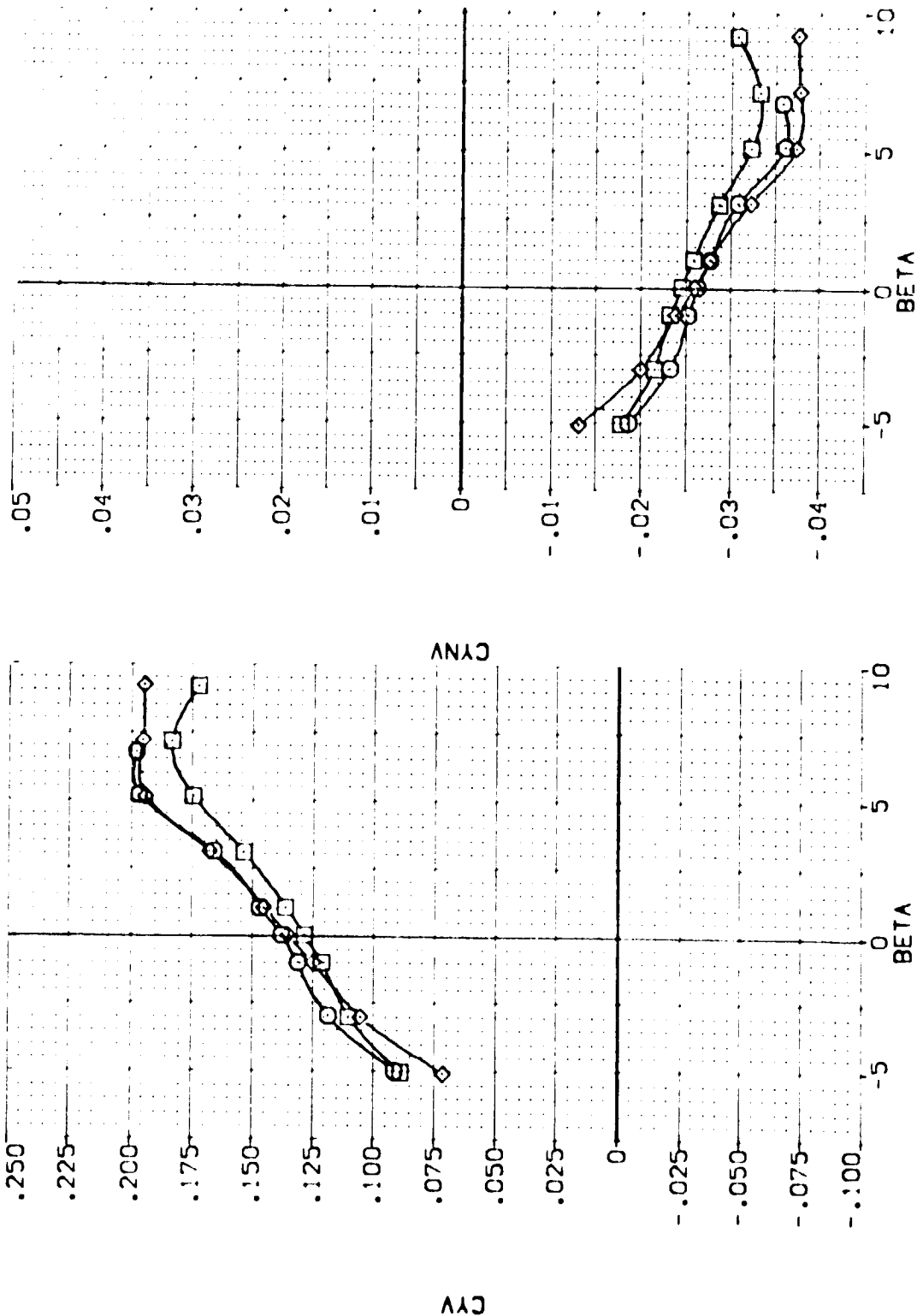


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(B)MAC = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	ARC	11-747	QAS3A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Q	ARC	11-747	QAS3A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Q	ARC	11-747	QAS3A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
Q	ARC	11-747	QAS3A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

ALPHA RUDDER BDF LAP SPL 3PK

ALPHA	RUDDER	BDF LAP	SPL 3PK
0.000	-25.000	-11.700	25.000
10.000	-25.000	-11.700	25.000
20.000	-25.000	-11.700	25.000

REFERENCE INFORMATION:

REF	2.4210	50.000
SREF	14.2440	50.000
LREF	28.1000	50.000
BREF	32.3010	50.000
YREF	11.2500	50.000
ZREF	11.2500	50.000
SCALE	1.0000	1.0000

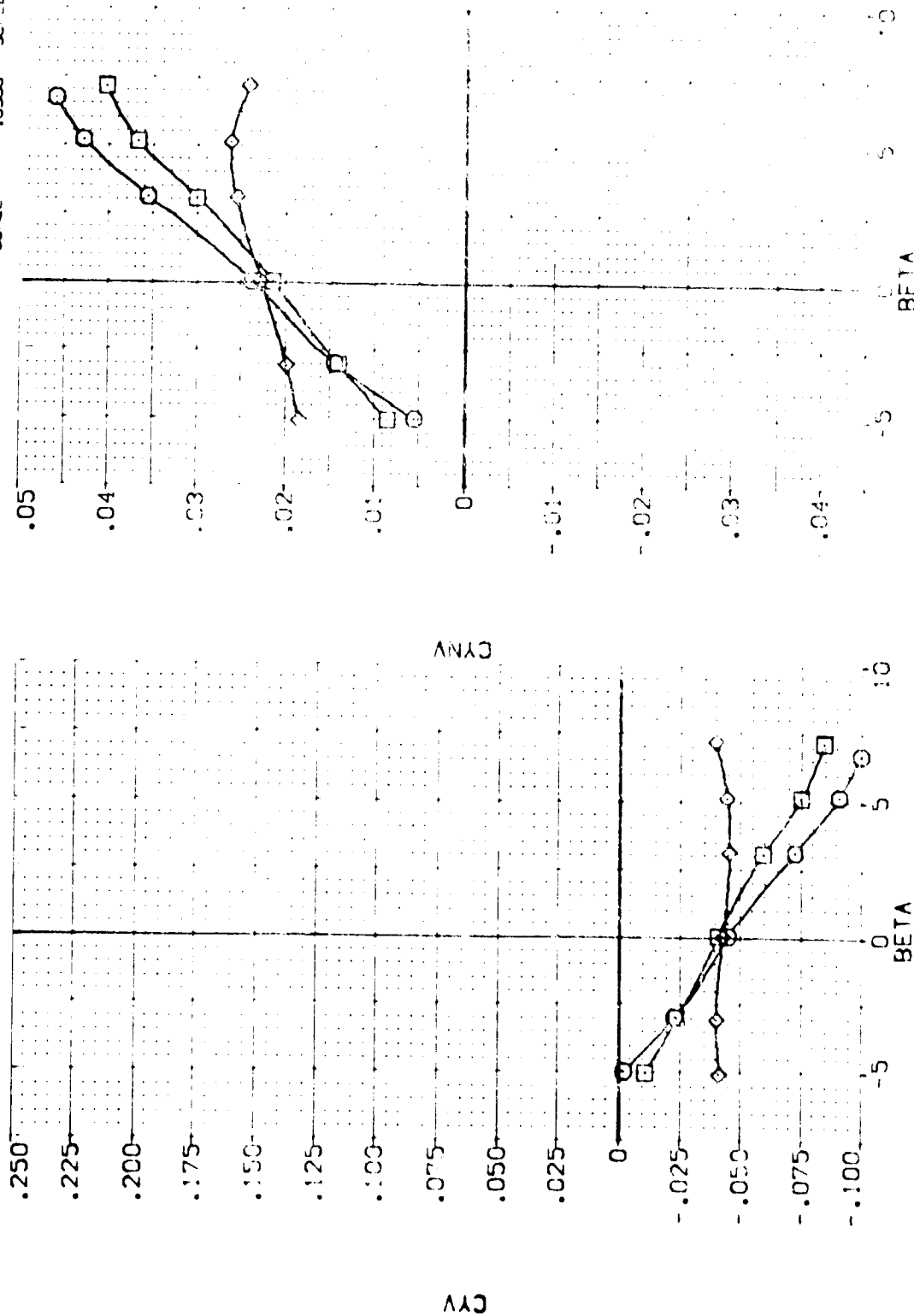


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEED/RAKE = 25 DEGREES

(C)MAC = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ032)	ARC 11-747 0A53A B C M F VI V	0.00	-25.000	-11.700	25.000	SREF 2.4210 SC.FT.
(AEJ033)	ARC 11-747 0A53A B C M F VI V	10.000	-25.000	-11.700	25.000	LREF 14.7440
(AEJ034)	ARC 11-747 0A53A B C M F VI V	20.000	-25.000	-11.700	25.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

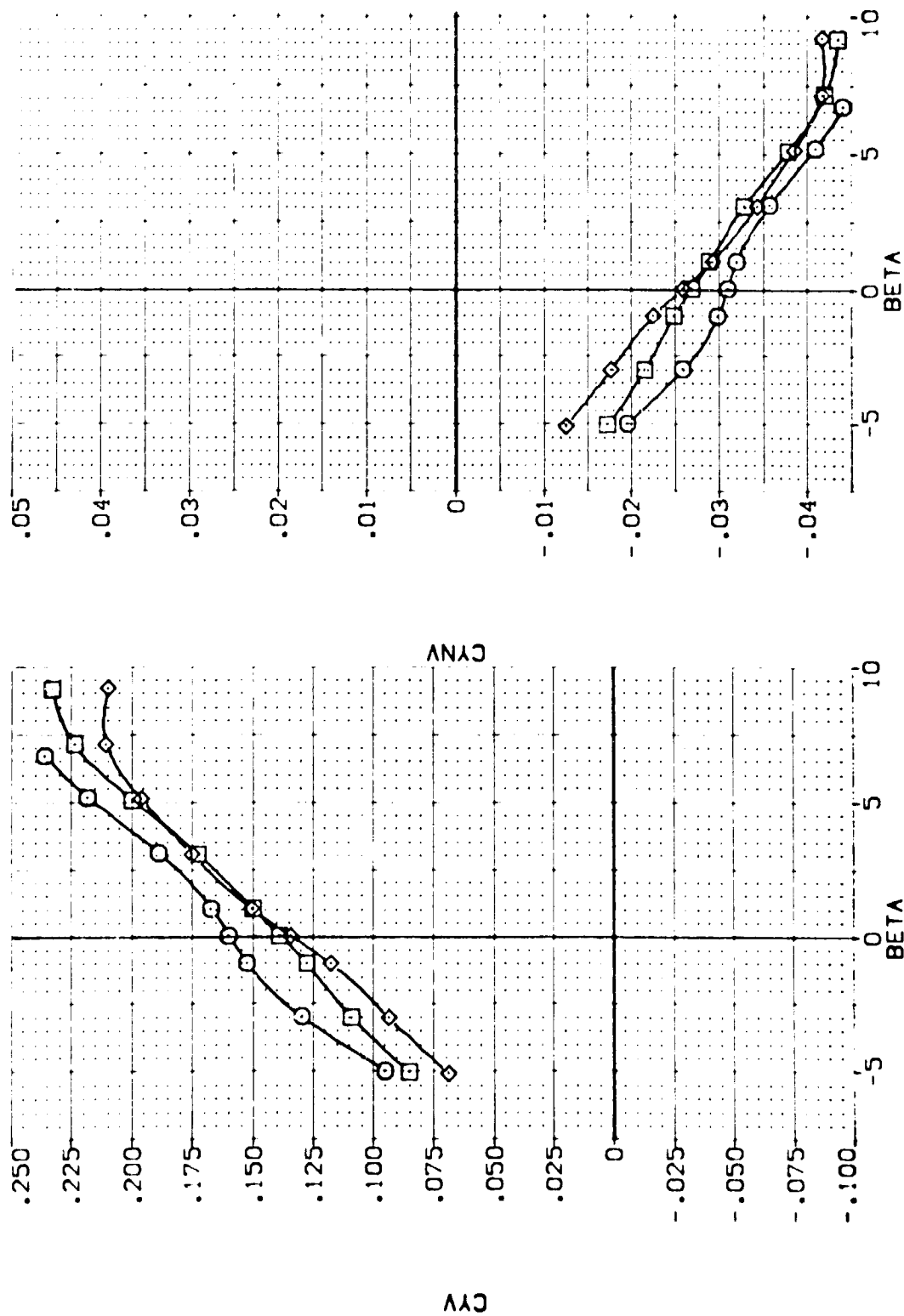


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES  
(D)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0032]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0033]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0034]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

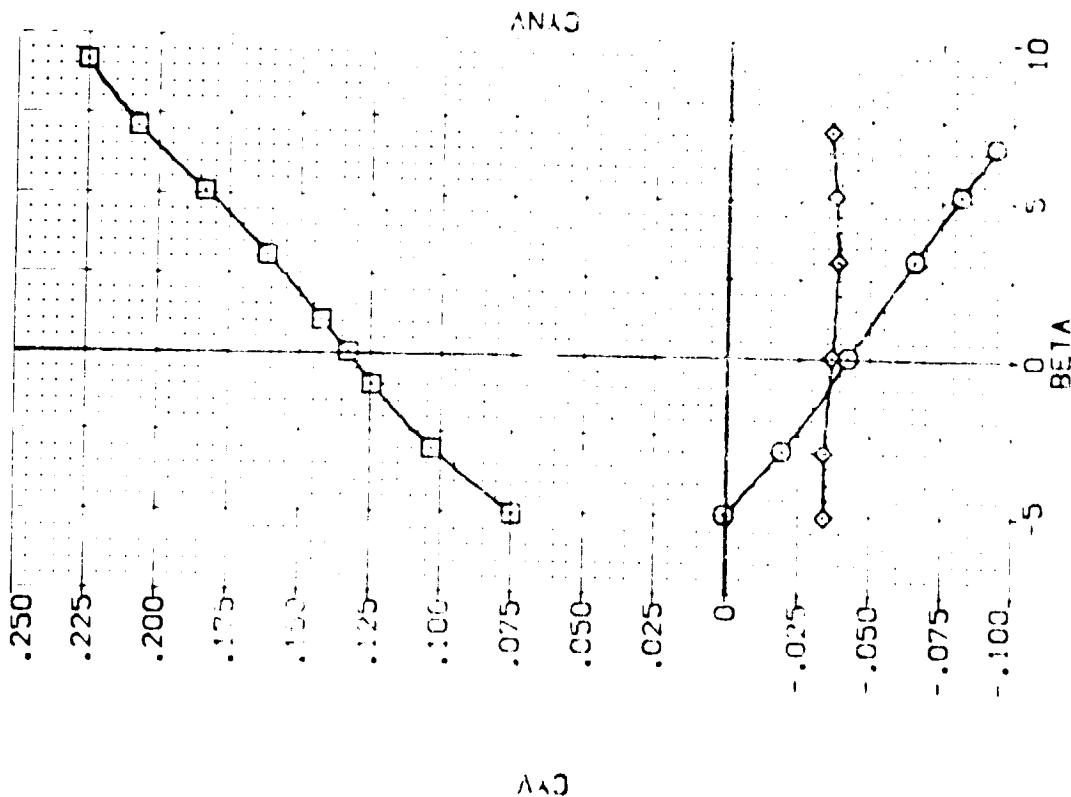


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(E)MAC = 1.20

ALPHA RUDDER BDF LAP SPOBRK

Symbol	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0032]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0033]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
[AE0034]	ARC	11-747	BA53A	B	C	H	F	V	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100

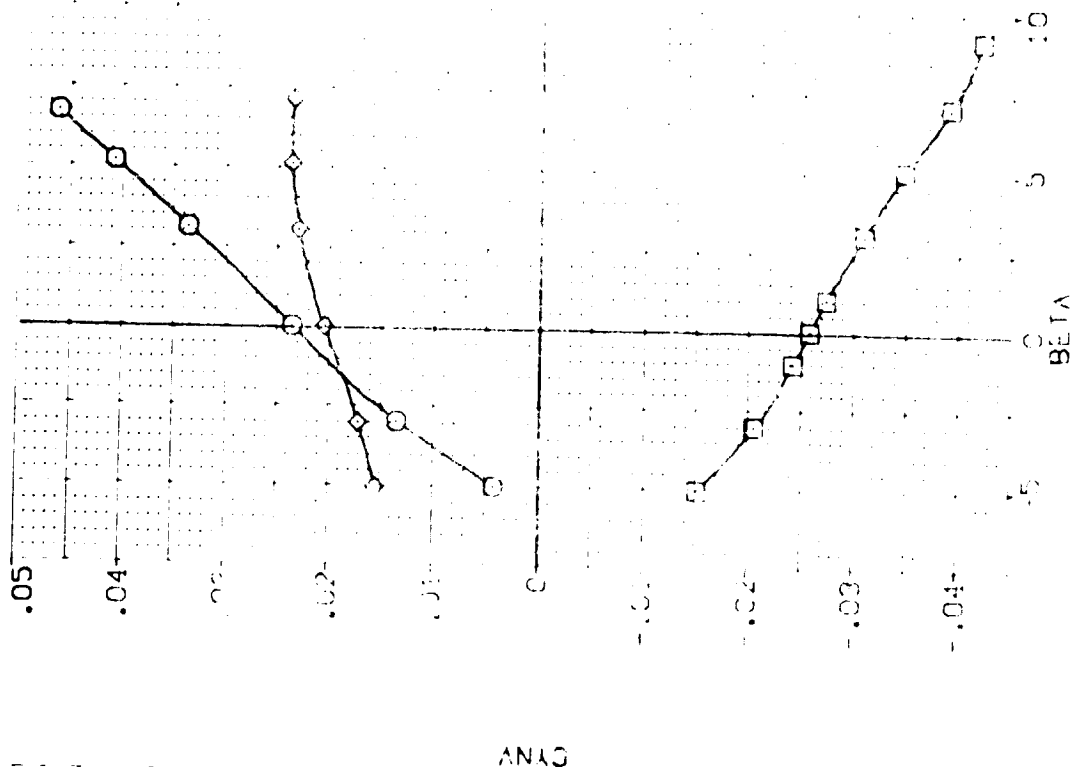


FIG. 38 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 25 DEGREES

(E)MAC = 1.20



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BD FLAP	SPOBRK	REFERENCE INFORMATION
(AEJ075)	ARC 11-747 B453A B C M F V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(AEJ076)	ARC 11-747 B453A B C M F V	10.000	.000	-11.700	55.000	LREF 14.2440
(AEJ077)	ARC 11-747 B453A B C M F V	20.000	.000	-11.700	55.000	BREF 28.1000
						XREF 32.3010
						YREF 0.000
						ZREF 11.2500
						SCALE 0.000

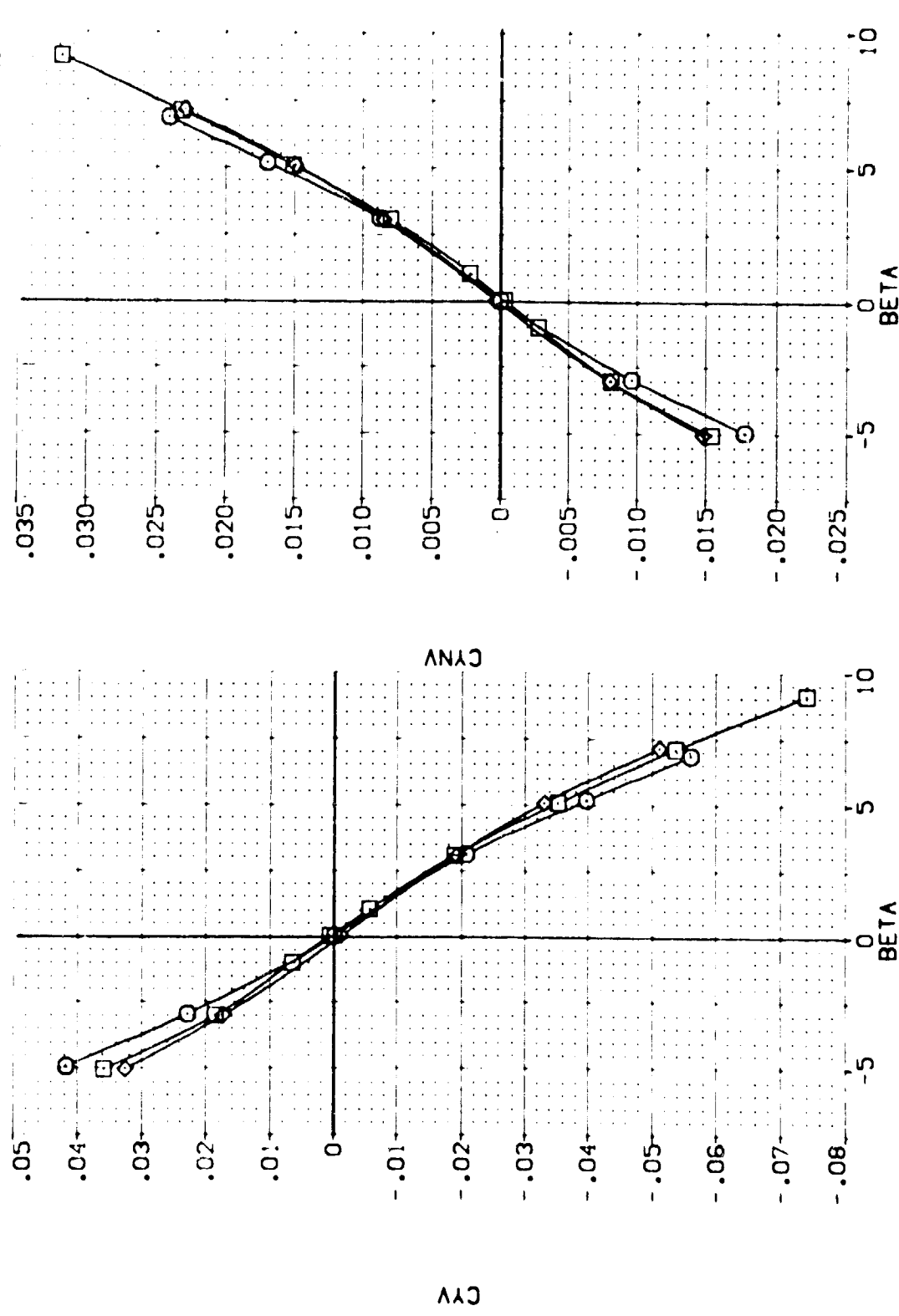


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	Configuration	Description
Q	ARC 11-747 CAS3A B C H F VI V	NOT: RV/L
Q	ARC 11-747 CAS3A B C H F VI V	NOT: RV/L
Q	ARC 11-747 CAS3A B C H F VI V	NOT: RV/L

ALPHA RUDDER BDF LAP SPOBAP

Alpha	Rudder	BDF	LAP	SPOBAP
.000	.000	.000	.000	.000
.000	.000	.000	.000	.000
.000	.000	.000	.000	.000
.000	.000	.000	.000	.000

REFERENCE INFORMATION

Reference	Information
SREF	2.4210 SQ. FT.
LREF	14.2440
BREF	28.1004
YREF	32.3010
ZREF	11.2500
SCALE	.0300

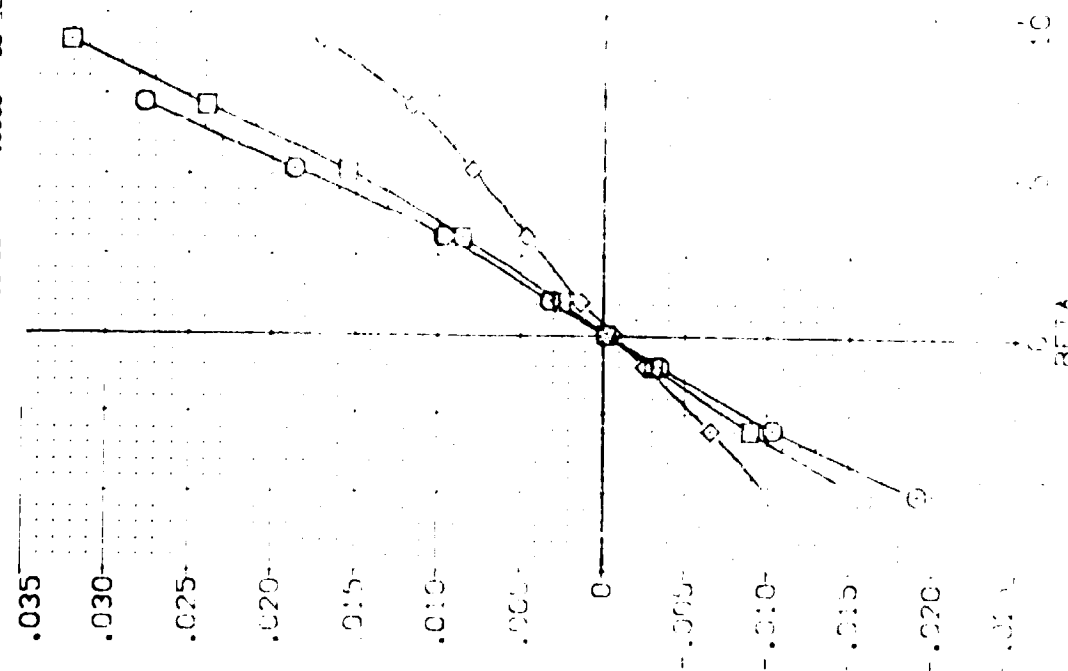
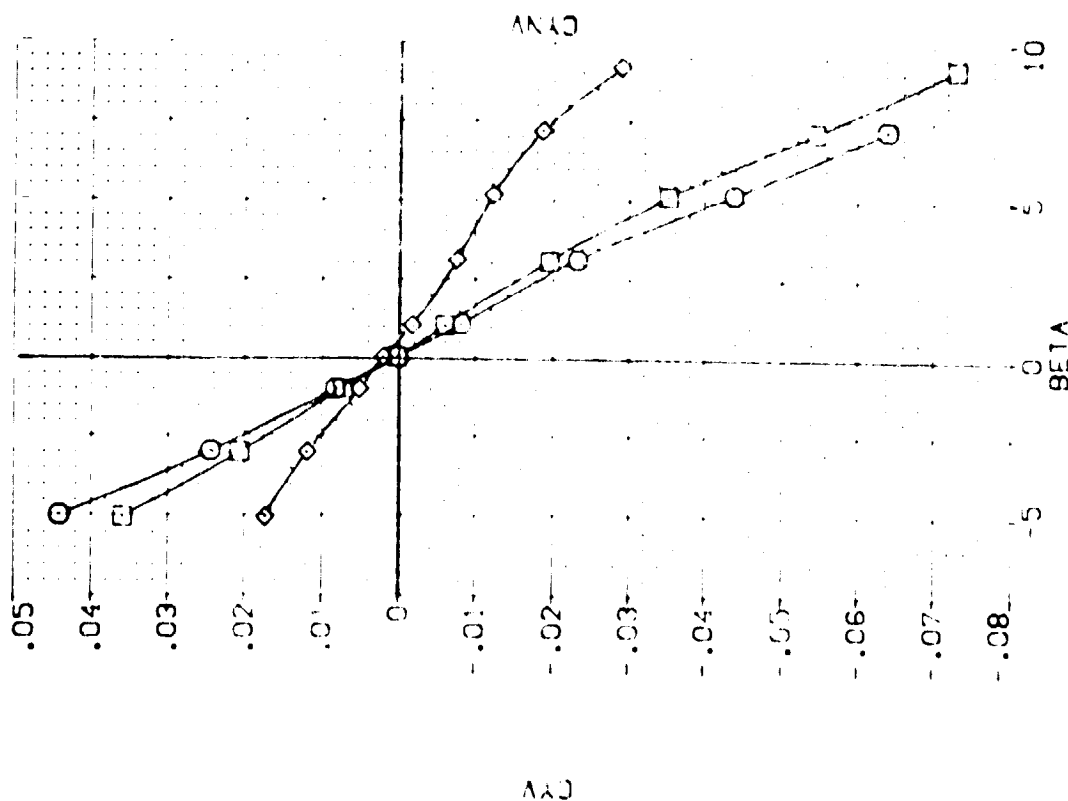


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEED BRAKE = 0.5 DEGREES

(B)MAC = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	DELTA P	SPOBRK	REFERENCE INFORMATION
[AEJ075]	ARC 11-747 BASSA B C H F V	.000	.000	-11.700	55.000	SREF 2.4210 SQ. FT.
[AEJ076]	ARC 11-747 BASSA B C H F V	10.000	.000	-11.700	55.000	LREF 14.2440
[AEJ077]	ARC 11-747 BASSA B C H F V	20.000	.000	-11.700	55.000	BREF 28.1004
						VMREF 32.3010
						ZMREF 11.7300
						SCALE .0300

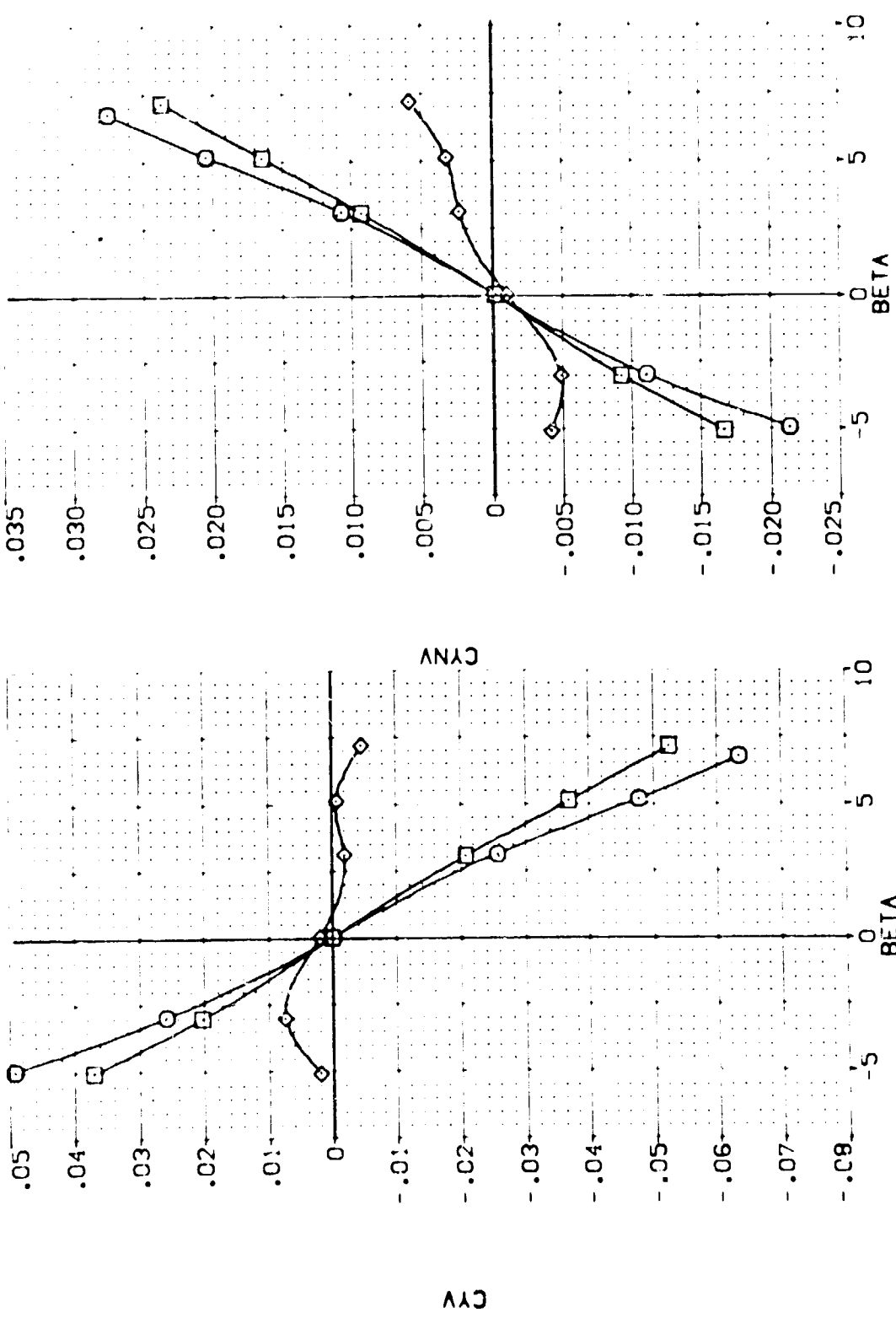


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES  
 (C)<sup>MAC</sup> = .90 PAGE 1087

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	FLIGHT	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ025]	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ076]	ARC 11-747 QAS3A B C H F VI V	10.000	.000	-11.700	55.000	LREF 14.244C
[AEJ027]	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	55.000	BREF 28.100A
						XMRP 32.3010
						YMRP .0000
						ZMRP .0000
						SCALE 11.2500
						SCALE .0300

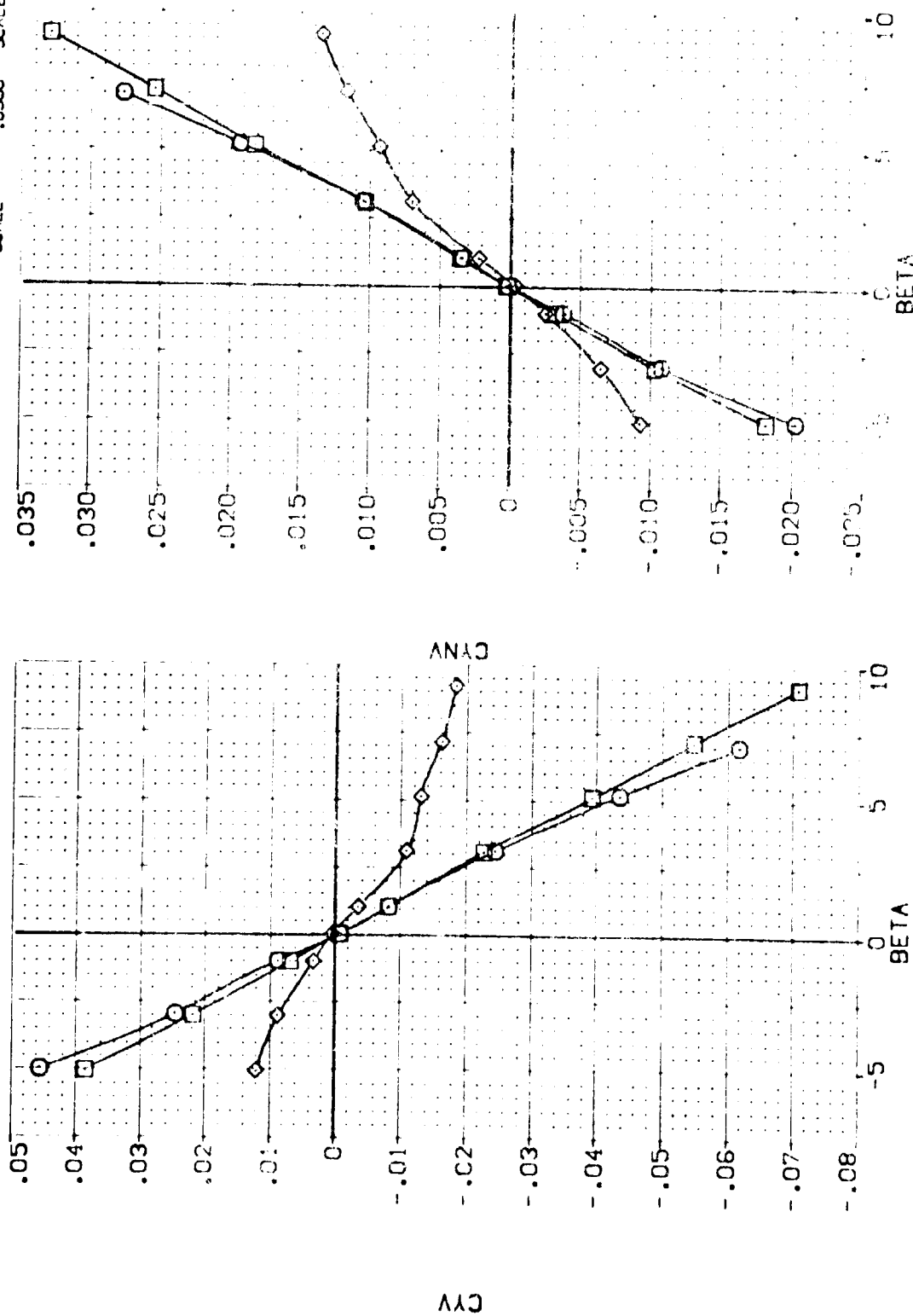


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEED BRAKE = 55 DEGREES

(D)MAC = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    NOM. RV/L

(AEJ0025)    Q    ARC 11-747 CA53A B C M F VI V    NOM. RV/L

(AEJ0026)    Q    ARC 11-747 CA53A B C M F VI V    NOM. RV/L

(AEJ0027)    Q    ARC 11-747 CA53A B C M F VI V    NOM. RV/L

ALPHA    RUDDER    BDF LAP    SPEEDBRK

0.000    .000    -11.700    55.000

10.000    .000    -11.700    55.000

20.000    .000    -11.700    55.000

REFERENCE INFORMATION

SREF    2.4210    SQ.FT.

LREF    14.2442    IN.

BREF    28.1004    IN.

AMRP    32.3000    IN.

YMRP    .0000    IN.

ZMRP    11.2500    IN.

SCALE    .0300    IN.

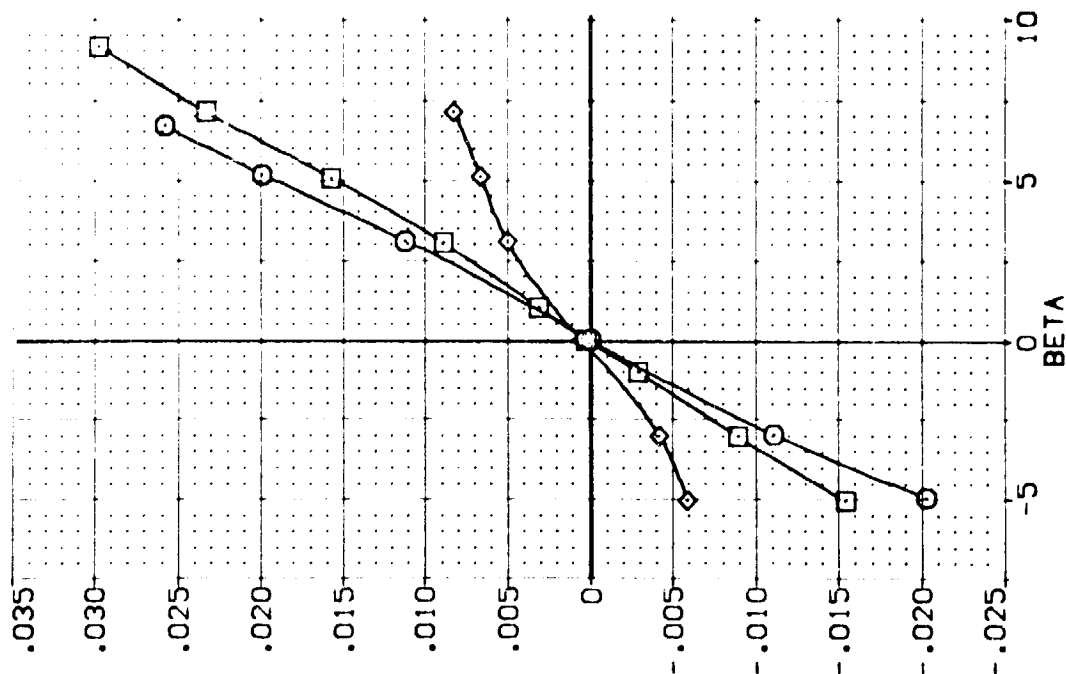
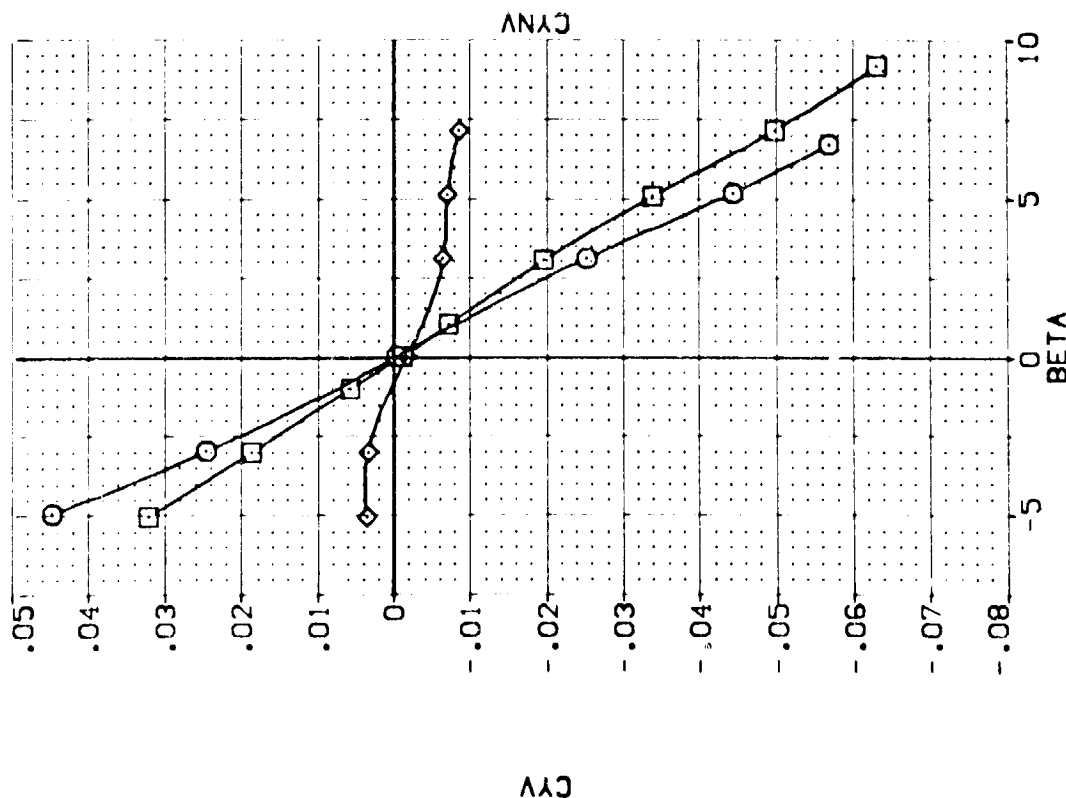


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BD/LAP	SPEEDBRAKE	REFERENCE INFORMATION
[AEJ035]	ARC 11-747 DA53A B C H F VI V	0.000	-10.000	-11.700	55.000	SREF 2.42.0 SQ.FT.
[AEJ036]	ARC 11-747 DA53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[AEJ037]	ARC 11-747 DA53A B C H F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 00.0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

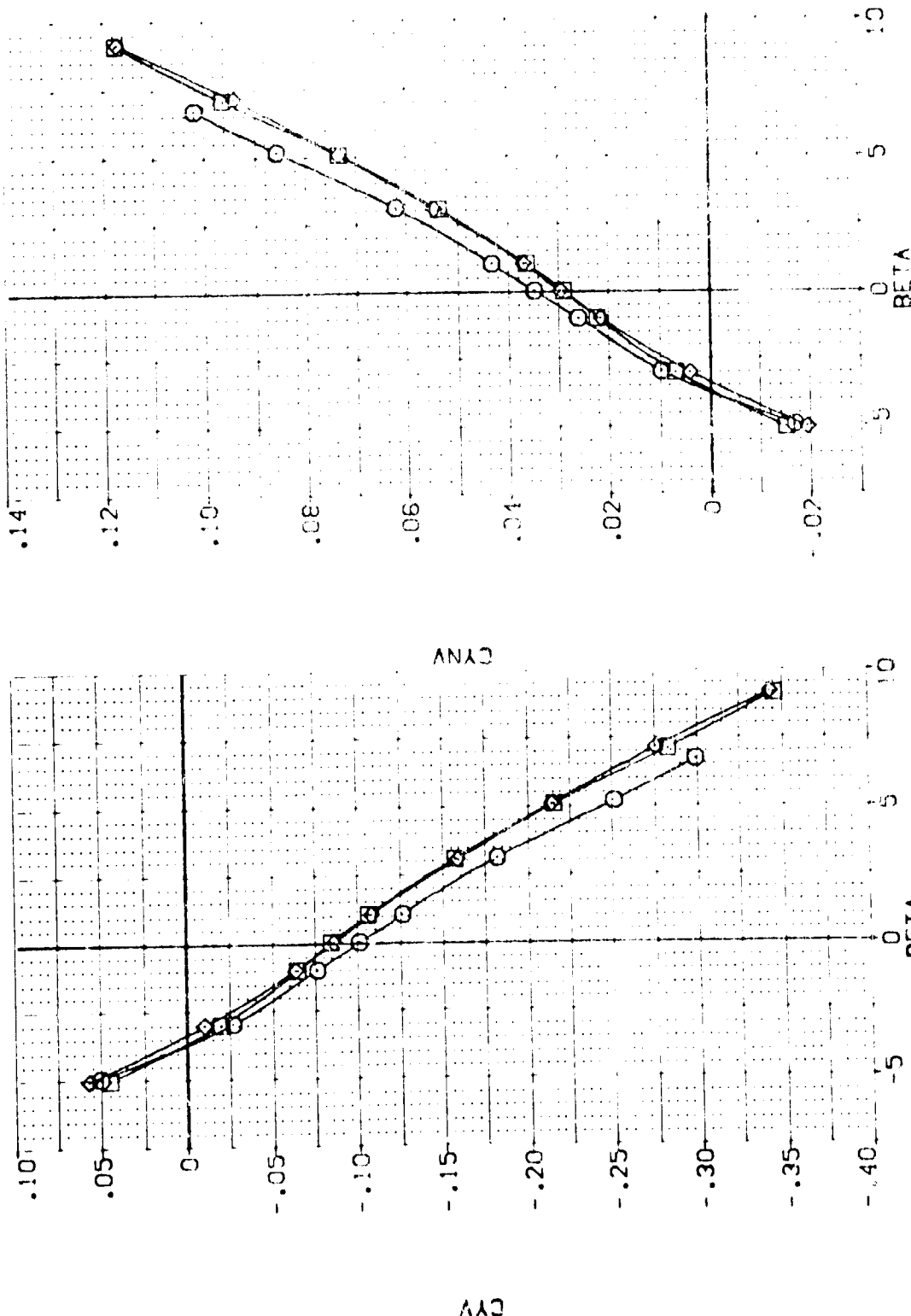


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(AEJ035)	ARC 11-747 0A53A B C M F V1	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(AEJ036)	ARC 11-747 0A53A B C M F V1	10.000	-10.000	-11.700	55.000	LREF 14.2440
(AEJ037)	ARC 11-747 0A53A B C M F V1	20.000	-10.000	-11.700	55.000	BREF 28.1004
						XMRP 32.3010
						YMRP 0.0000
						ZMRP 11.2500
						SCALE 1.0300

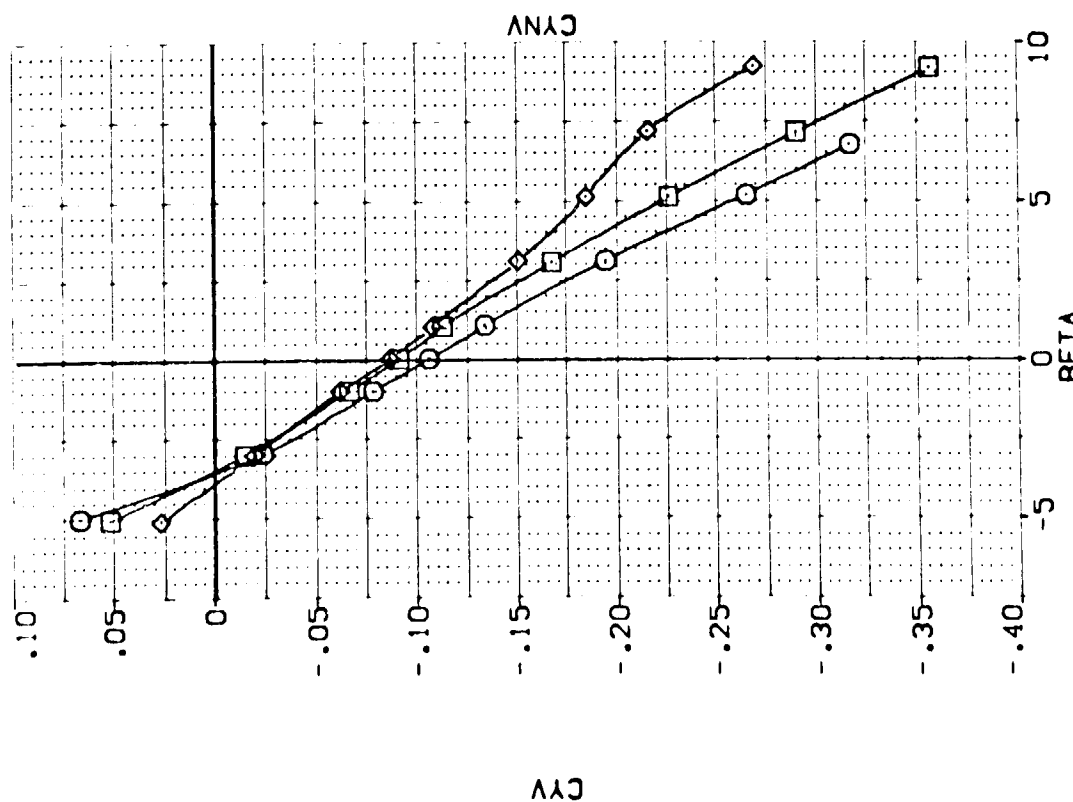
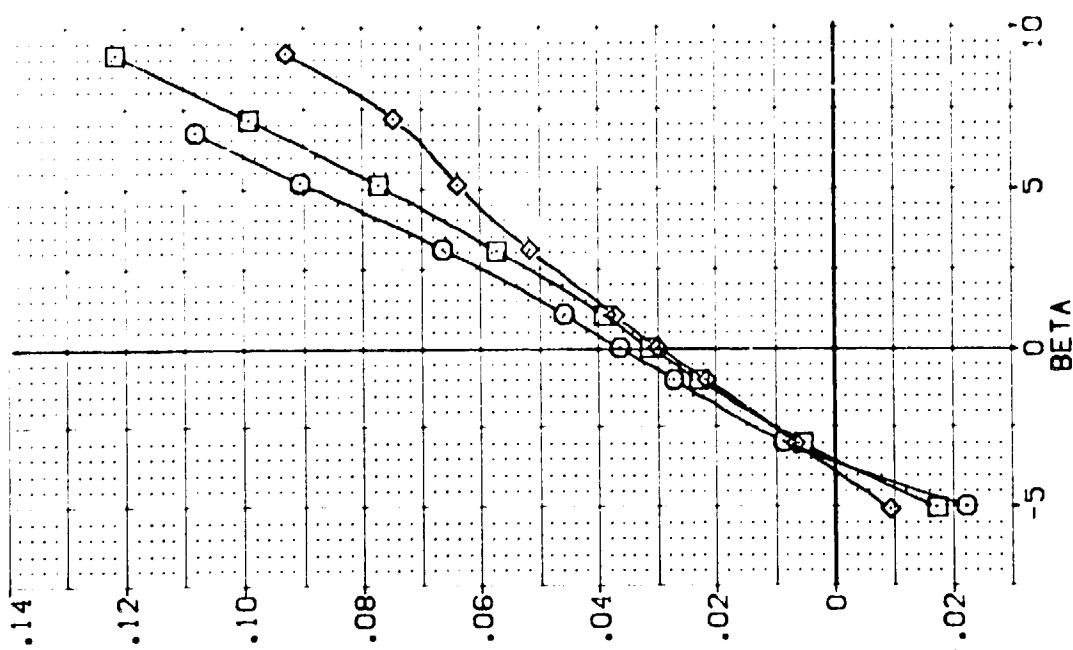


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AEJ035) ARC 11-747 BAS3A B C M F VI V NOM: RV/L

(AEJ036) ARC 11-747 BAS3A B C M F VI V NOM: RV/L

(AEJ037) ARC 11-747 BAS3A B C M F VI V NOM: RV/L

ALPHA RUDDER BOFLAP SPEEDBRK

0.000 -10.000 -11.700 55.000

10.000 -10.000 -11.700 55.000

20.000 -10.000 -11.700 55.000

REFERENCE INFORMATION

SREF 2.4210 50. FT.

LREF 14.2440

BREF 28.1004

XMRP 32.3010

YMRP 0.0000

ZMRP 11.2500

SCALE 0.0300

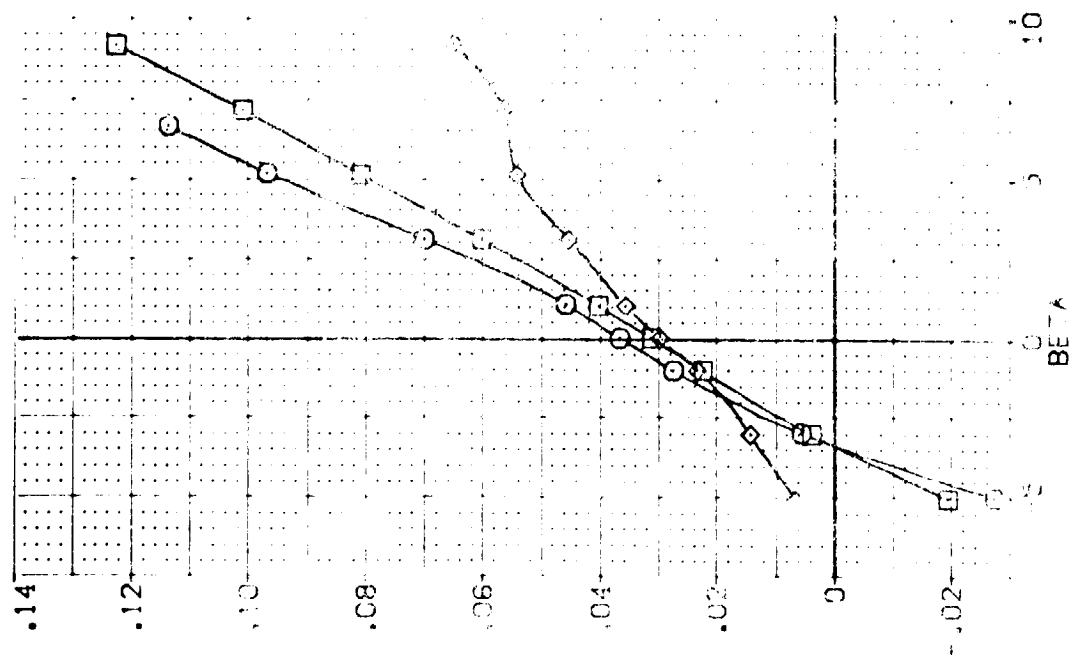
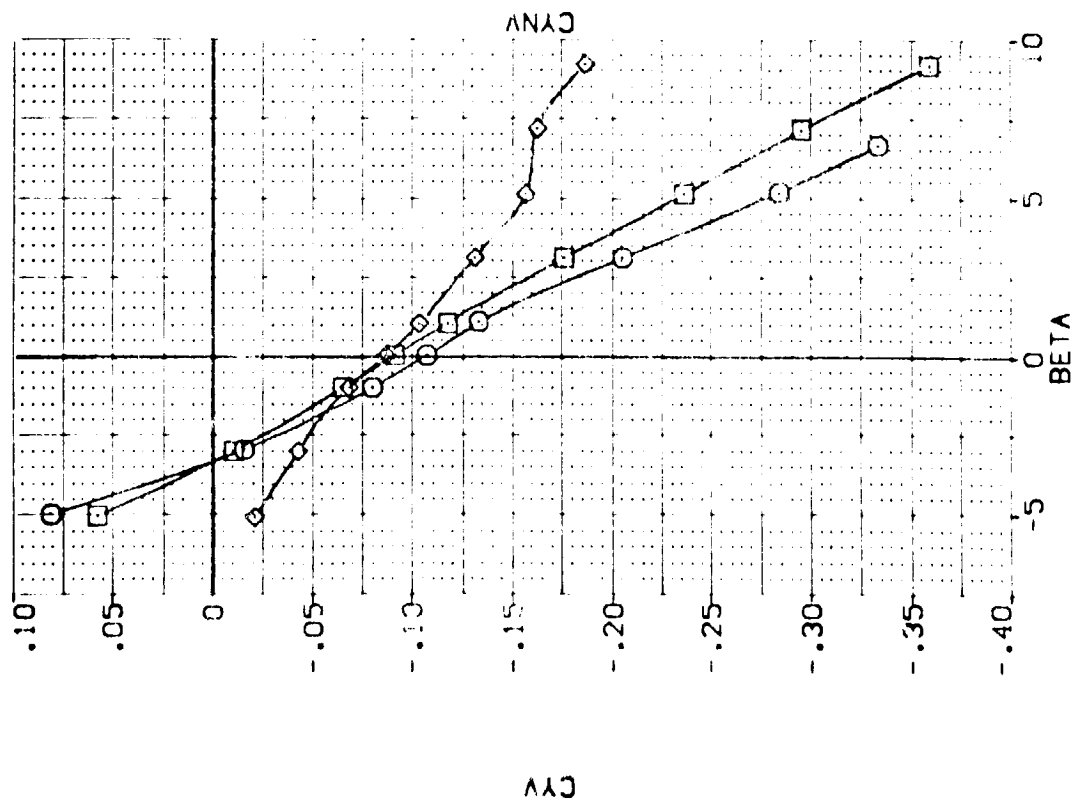


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(C)MACH = .90



DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	ARC	11-747	0A53A	B	C	M	F	V1	V	NOM	RVNL
(AE-0026)	ARC	11-747	0A53A	B	C	M	F	V1	V	NOM	RVNL
(AE-0036)	ARC	11-747	0A53A	B	C	M	F	V1	V	NOM	RVNL
(AE-0037)	ARC	11-747	0A53A	B	C	M	F	V1	V	NOM	RVNL

ALPHA RUDDER BOFLAP SPEED

ALPHA	RUDDER	BOFLAP	SPEED
0.000	-10.000	-11.700	55.000
10.000	-10.000	-11.700	55.000
20.000	-10.000	-11.700	55.000

REFERENCE INFORMATION:

SRF	2.4210	50. FT.
LRP <td>14.2440 <td></td> </td>	14.2440 <td></td>	
BRP <td>28.1104 <td></td> </td>	28.1104 <td></td>	
XMRP <td>32.3010 <td></td> </td>	32.3010 <td></td>	
YMRP <td>0.000 <td></td> </td>	0.000 <td></td>	
ZMRP <td>11.2500 <td></td> </td>	11.2500 <td></td>	
SCALE <td>0.300 <td></td> </td>	0.300 <td></td>	

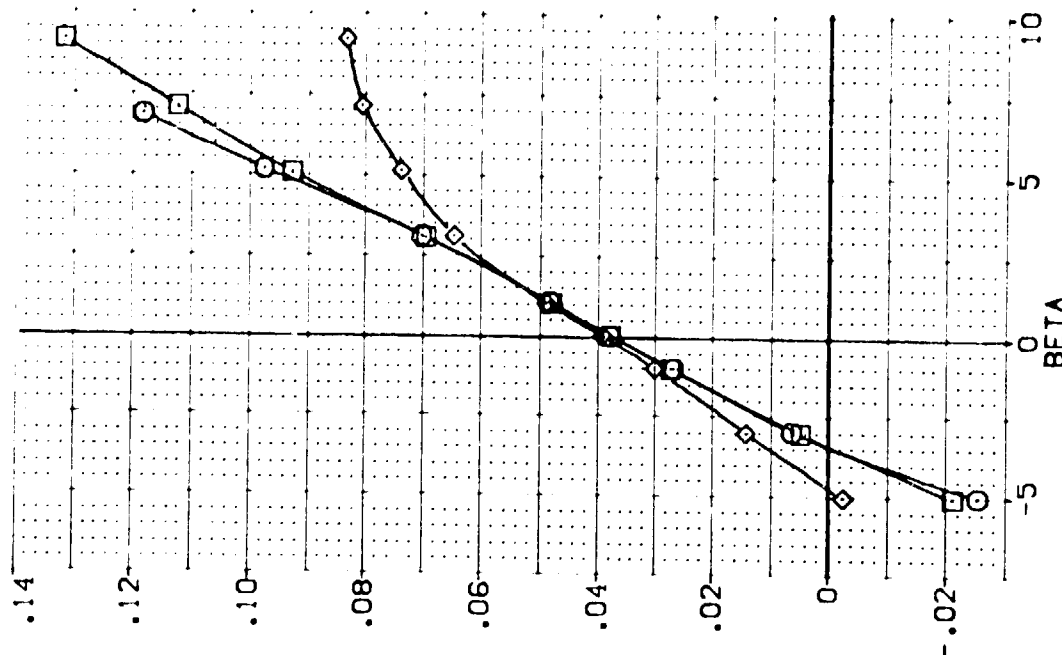
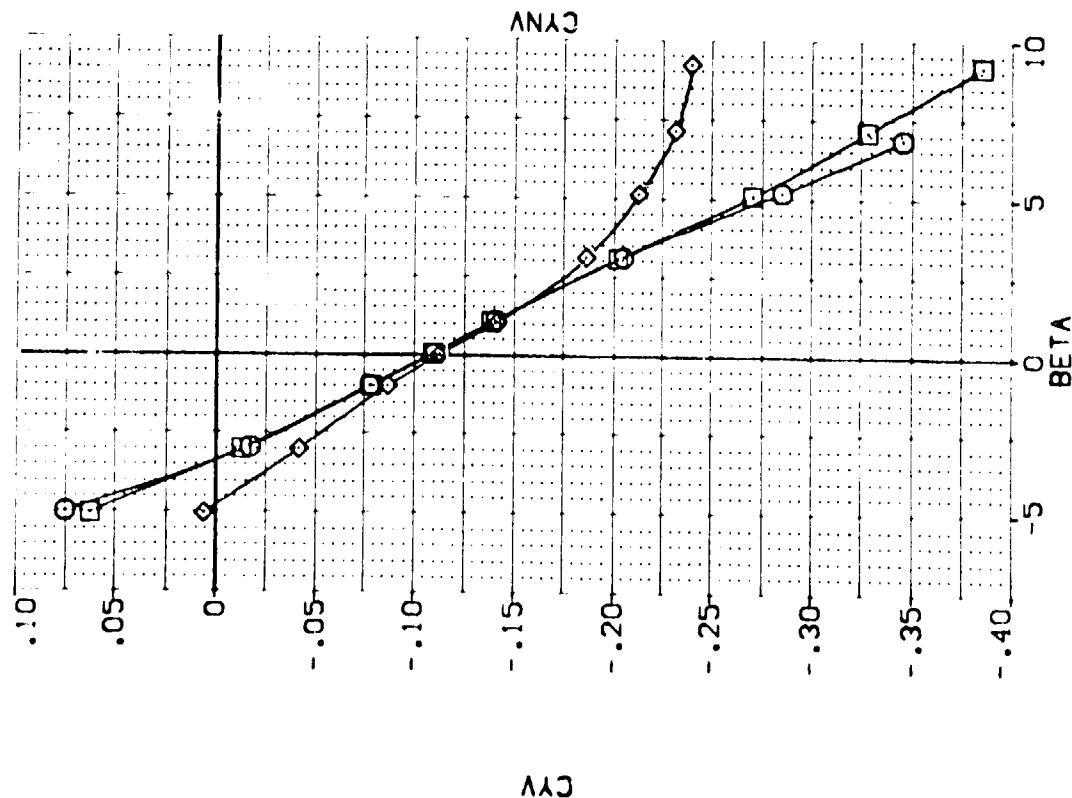


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(D)MAC = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOFLAP	SPEEDK	REFERENCE INFORMATION
[AE1036]	ARC 11-747 0A53A B C M F V I V	0.000	-10.000	-11.700	55.000	SREF 2.42.0 50. FT.
[AE1036]	ARC 11-747 0A53A B C M F V I V	10.000	-10.000	-11.700	55.000	LREF 14.24.0
[AE1037]	ARC 11-747 0A53A B C M F V I V	20.000	-10.000	-11.700	55.000	BREF 28.1004
						XMRP 32.30.0
						YMRP .0000
						ZMRP 11.25.00
						SCALE .0300

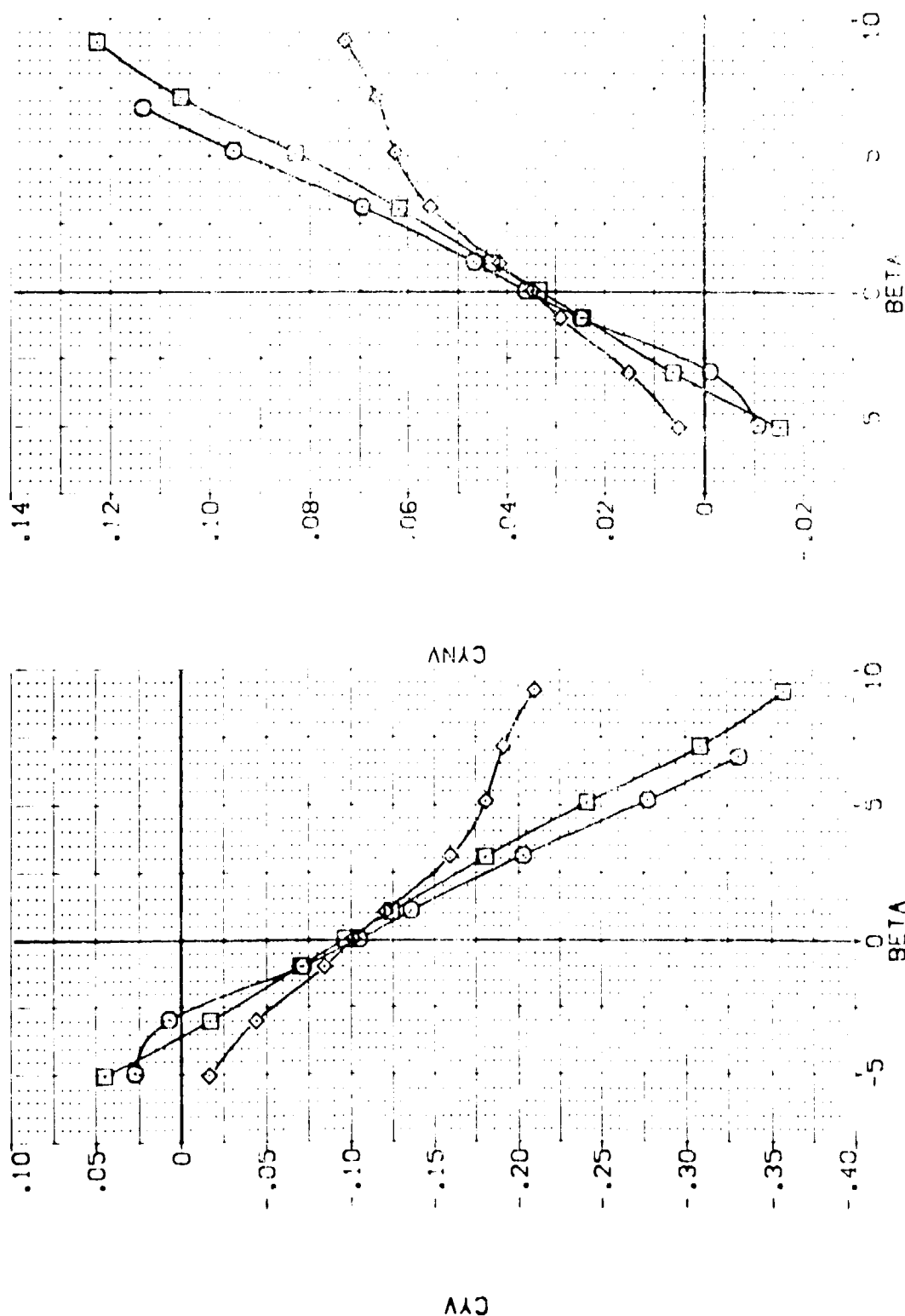


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(E)MAC = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AEJ051)	ARC	11-747	DA53A	B	C	M	F	V	NON	RVUL
(AEJ052)	ARC	11-747	DA53A	B	C	M	F	V	NON	RVUL
(AEJ053)	ARC	11-747	DA53A	B	C	M	F	V	NON	RVUL

ALPHA RUDDER BDF LAP SPOBRK

000	-25.000	-11.700	55.000
10.000	-25.000	-11.700	55.000
20.000	-25.000	-11.700	55.000

REFERENCE INFORMATION

SREF	2.4210	50. FT.
LREF	14.2440	IN.
BREF	28.1004	IN.
XPROP	32.3010	IN.
YPROP	.0000	IN.
ZPROP	11.2500	IN.
SCALE	.0300	SCALE

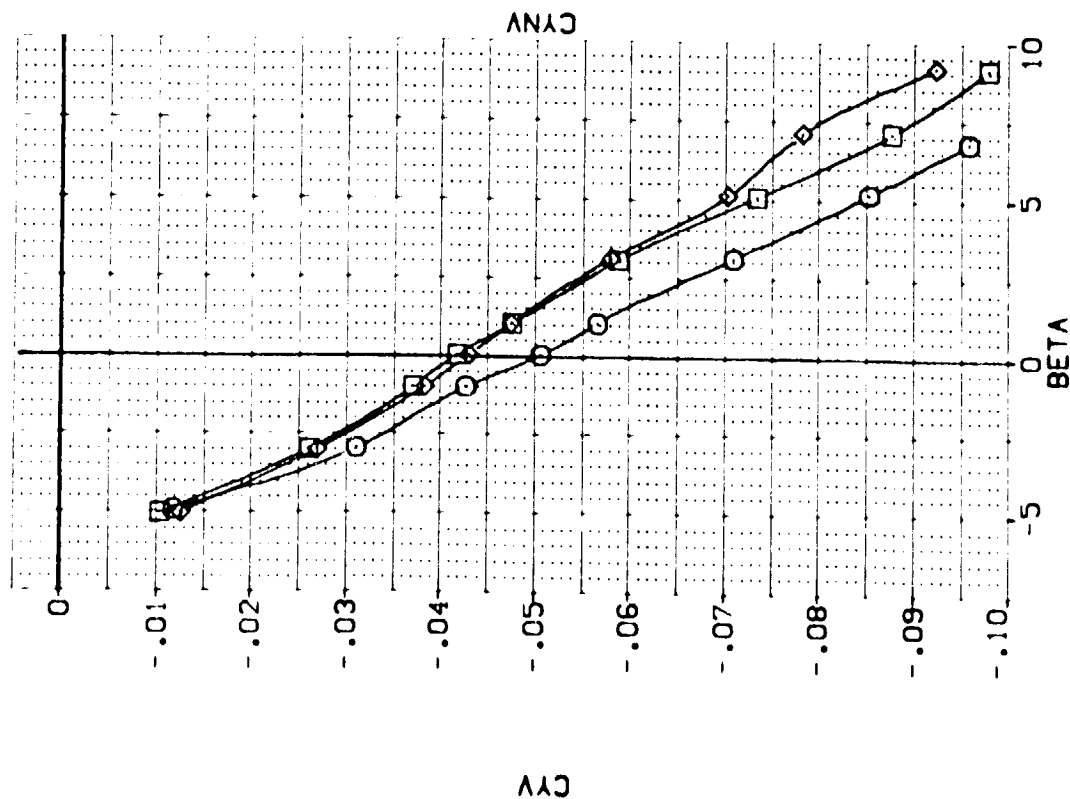


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[AEJ051]	ARC 11-747 BA53A B C M F VI V	0.000	-25.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ052]	ARC 11-747 BA53A B C M F VI V	10.000	-25.000	-11.700	55.000	LREF 14.2440 N.
[AEJ053]	ARC 11-747 BA53A B C M F VI V	20.000	-25.000	-11.700	55.000	BREF 28.1004 N.
						XMRP 32.3010 N.
						YMRP .0000 N.
						ZMRP 11.2500 N.
						SCALE .0300

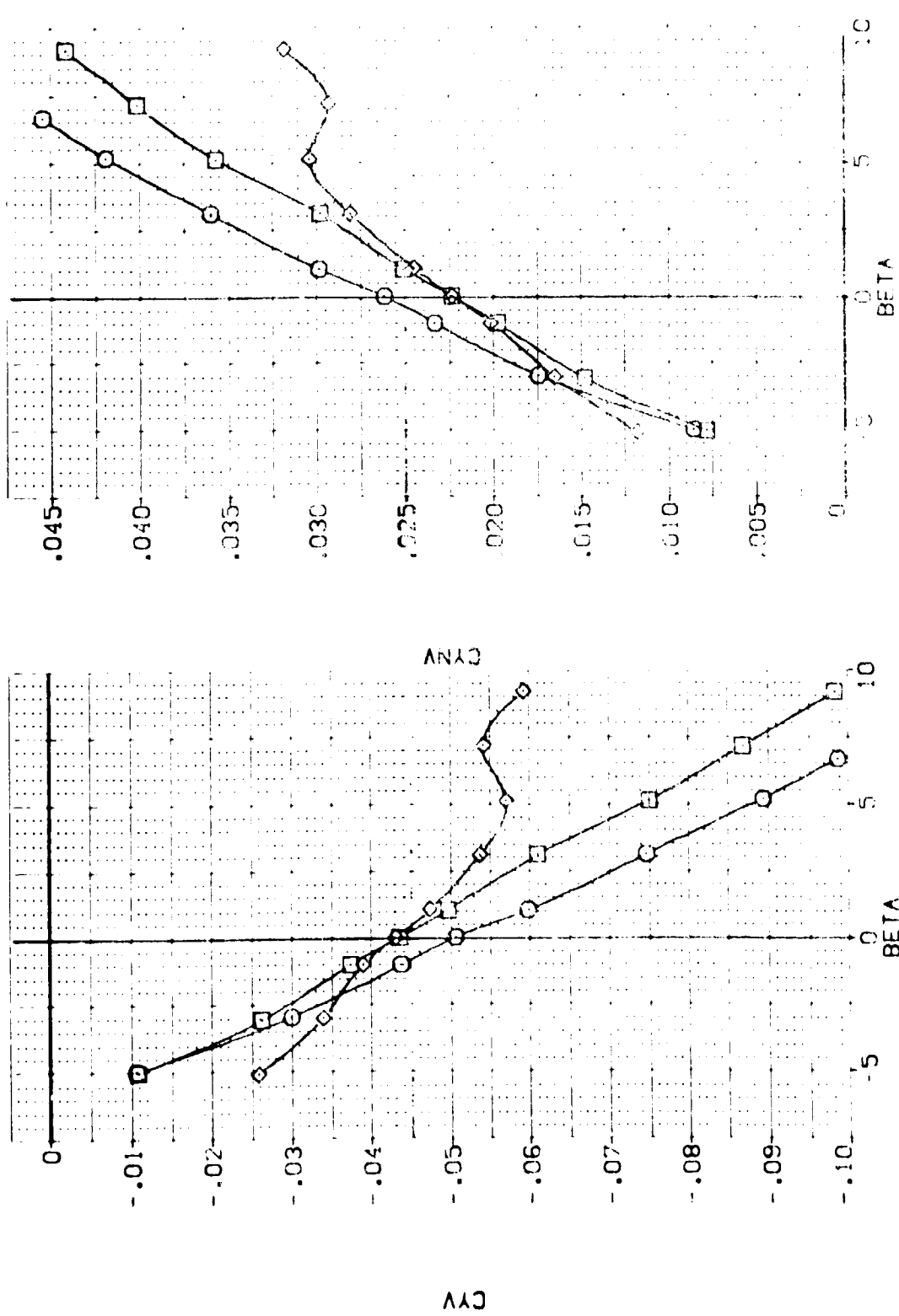


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

DATA SET SYMBOL    CONFIGURATION DESCRIPTION

(AEJ051)    Q    ARC 11-747 0A53A B C M F V1 V    NOM: RV/L

(AEJ052)    Q    ARC 11-747 0A53A B C M F V1 V    NOM: RV/L

(AEJ053)    Q    ARC 11-747 0A53A B C M F V1 V    NOM: RV/L

ALPHA    RUDDER    BOFLAP    SPEEDBRK

0.000    -25.000    -11.700    55.000

10.000    -25.000    -11.700    55.000

20.000    -25.000    -11.700    55.000

REFERENCE INFORMATION

SREF    2.4210    50. FT.

UREF    14.2440    IN.

BREF    28.1004    IN.

XMRP    32.3010    IN.

YMRP    0.0000    IN.

ZMRP    11.2500    IN.

SCALE    .0300    SCALE

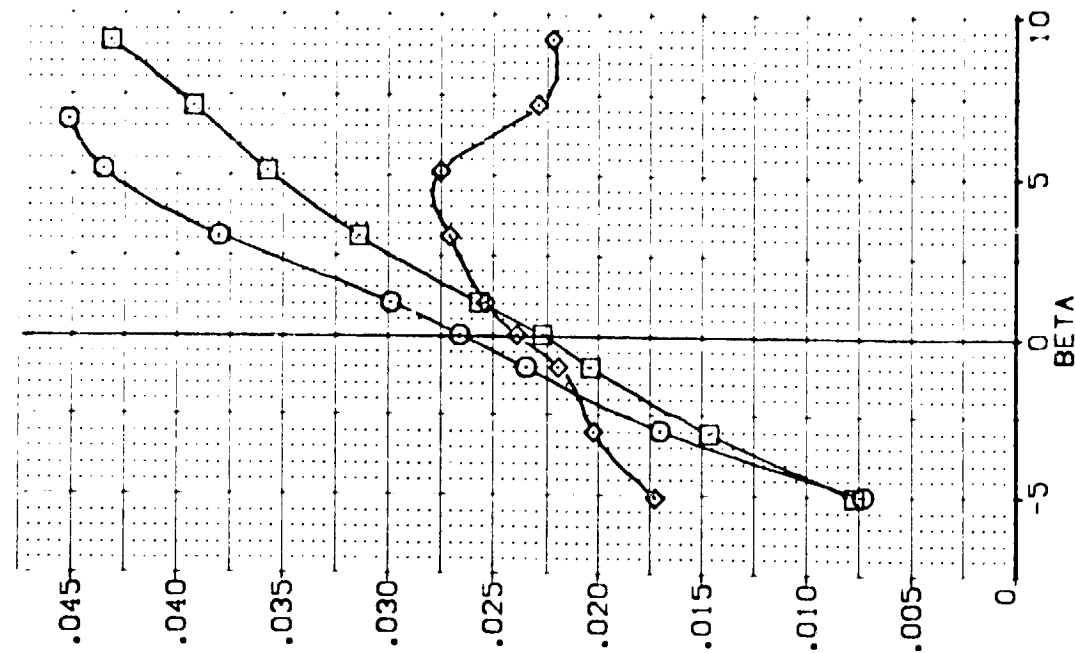
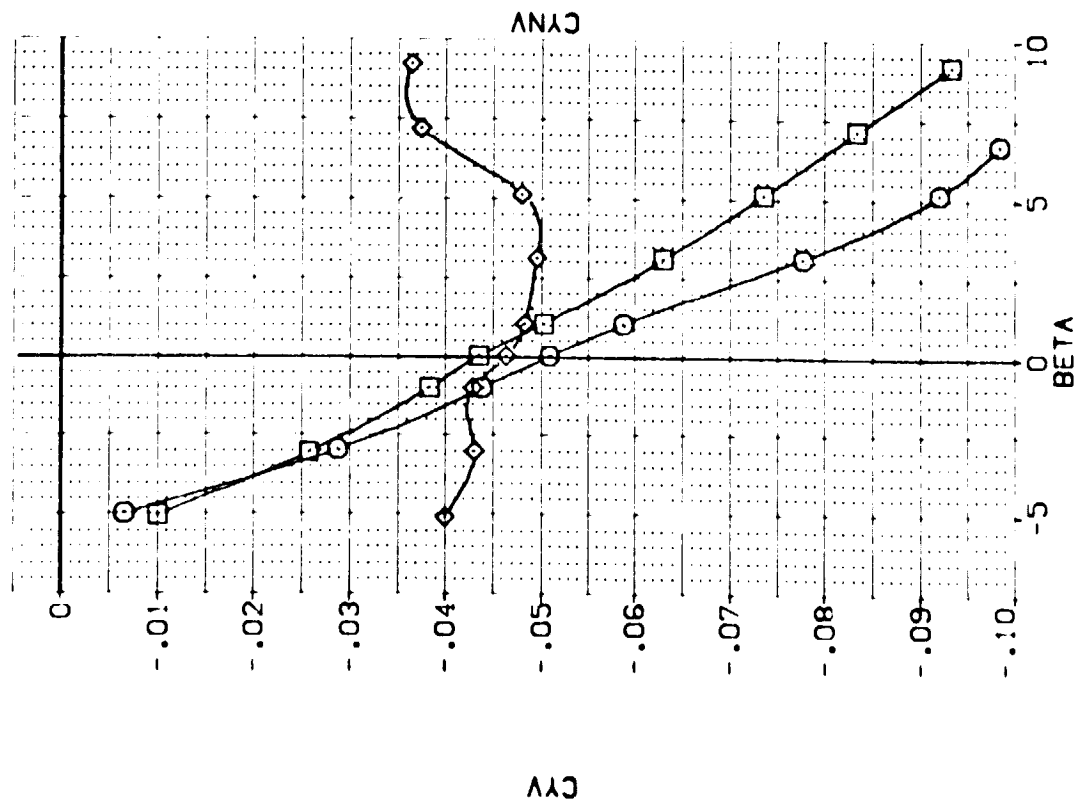


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(CJ)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
[AEJ051]	ARC 11-747 BA53A B C H F VI V	0.000	-25.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[AEJ052]	ARC 11-747 BA53A B C H F VI V	10.000	-25.000	-11.700	55.000	LREF 14.2440
[AEJ053]	ARC 11-747 BA53A B C H F VI V	20.000	-25.000	-11.700	55.000	BREF 28.0040
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.2500
						SCALE .0300

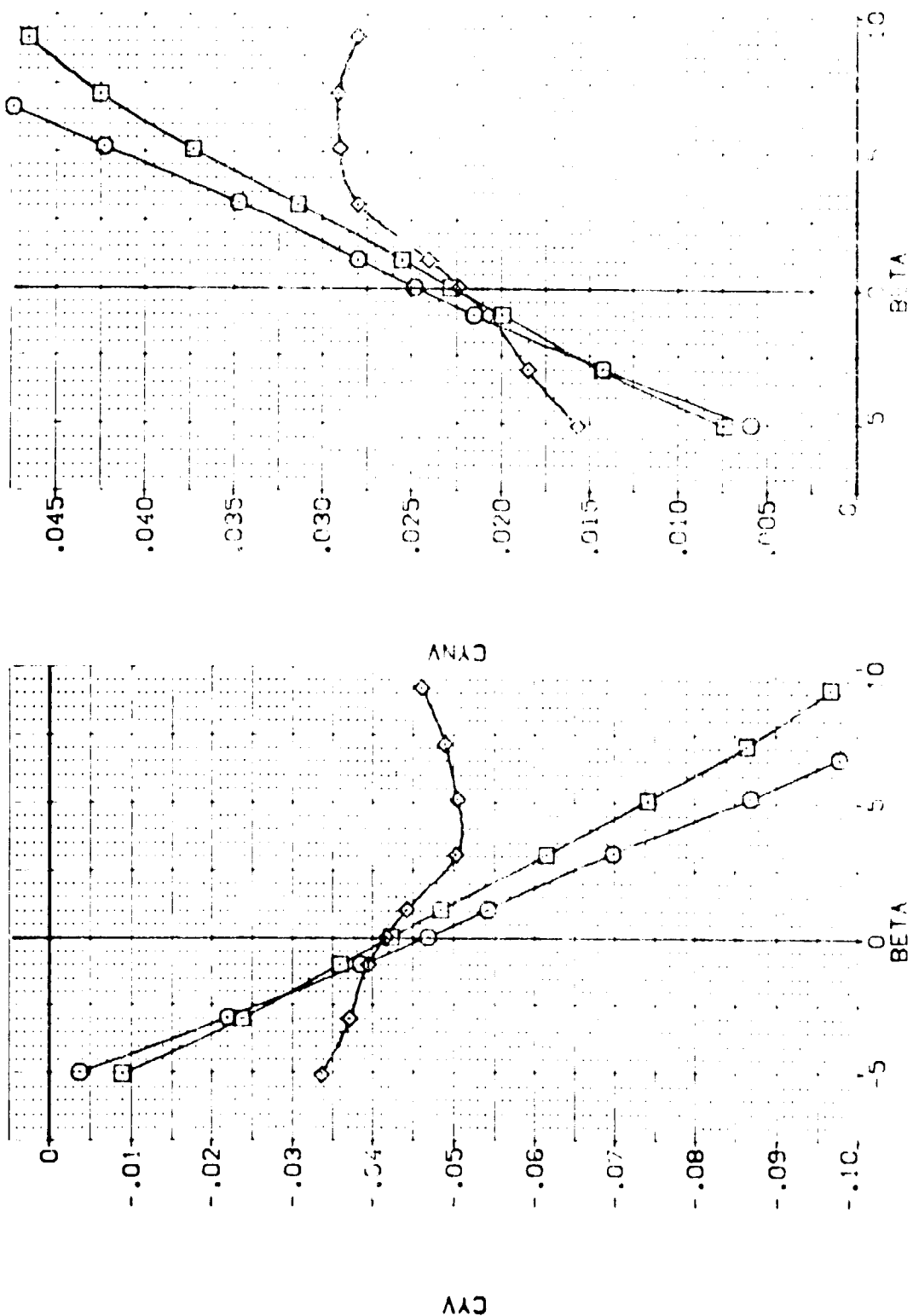


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(0)MAC = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

(AEJ051)	Q	ATC	11-747	0A53A	B	C	M	F	V	V	NON	RVUL
(AEJ052)	Q	ABC	11-747	0A53A	B	C	M	F	V	V	NON	RVUL
(AEJ053)	Q	ABC	11-747	0A53A	B	C	M	F	V	V	NON	RVUL

ALPHA RUDDER BDLAP SPOBRK

0.000	-25.000	-11.700	55.000
10.000	-25.000	-11.700	55.000
20.000	-25.000	-11.700	55.000

REFERENCE INFORMATION

SREF	2.4710	50.17
LREF	14.2440	
BREF	28.1004	
AH200	32.0000	
YH200	11.0000	
ZH200	11.0000	
SCALE	10.000	

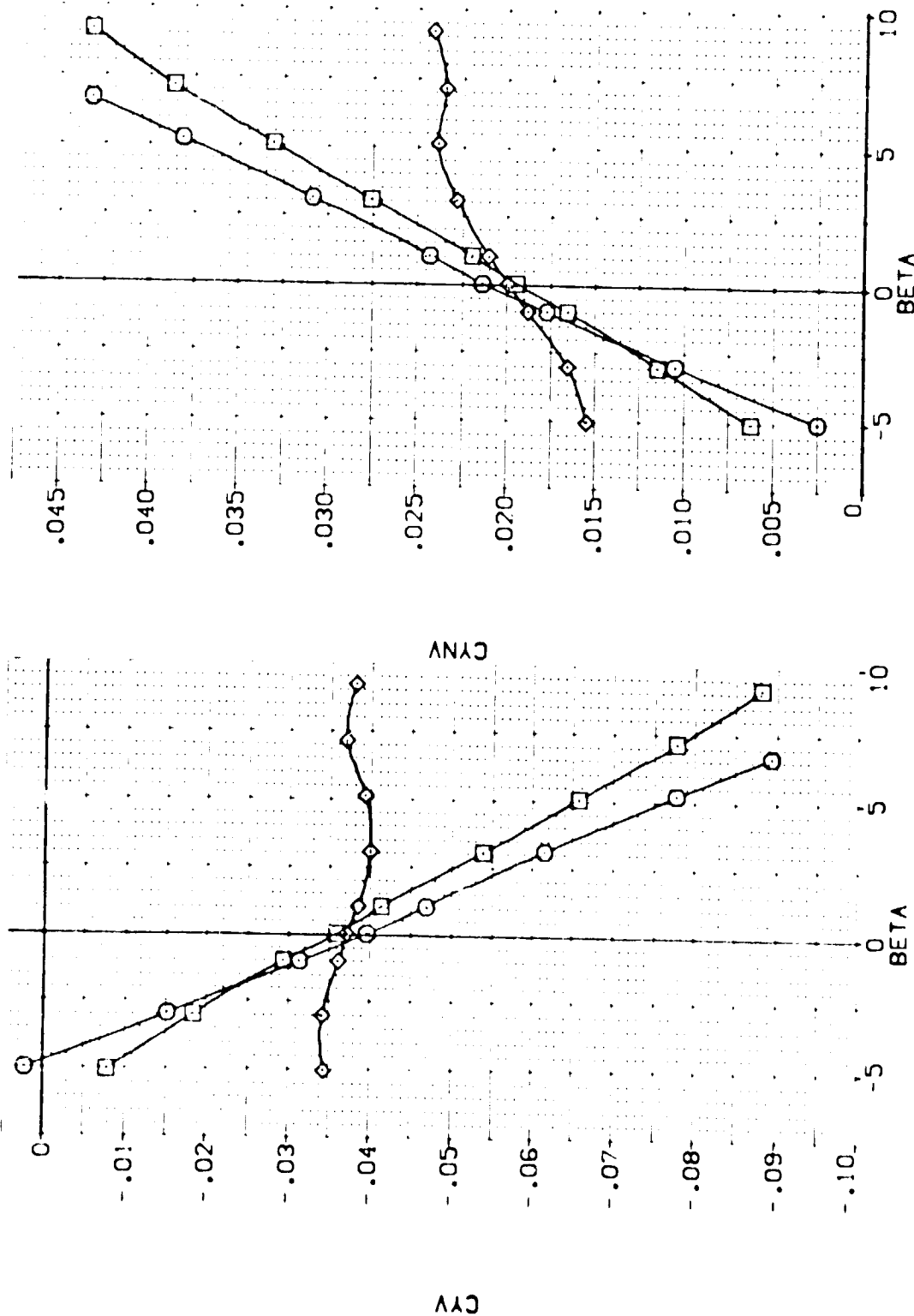


FIG. 39 VERTICAL TAIL LOADS VERSUS SIDESLIP, SPEEDBRAKE = 55 DEGREES

(E)MAC = 1.20

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

SYMBOL  
O  
O  
O

ALPHA  
.000  
10.000  
20.000

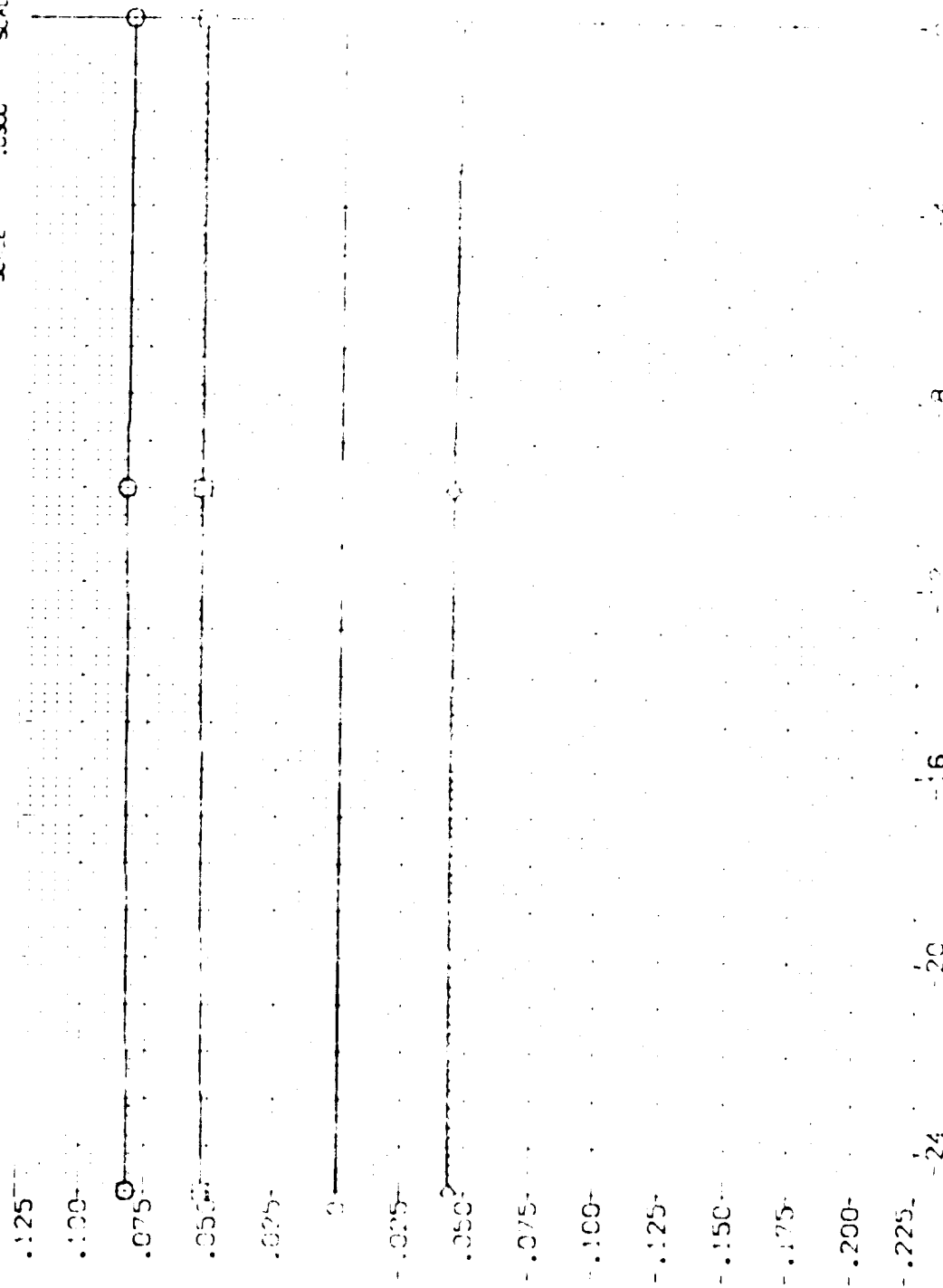
MACH  
ELEVON  
BOFLAP  
ELEV-L

PARAMETRIC VALUES  
BETA  
AILRON  
SPOBRK  
ELEV-R

REFERENCE INFORMATION  
SREV  
LREF  
BREF  
YREF  
ZREF  
SCALE

2.4210  
14.2440  
28.1004  
32.3010  
11.2500  
1.0300

50. FT.



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBRAKE = 25 DEG



ARC 11-747 0A53A B C M F W1 V NOM, RN/L (EEJ032)

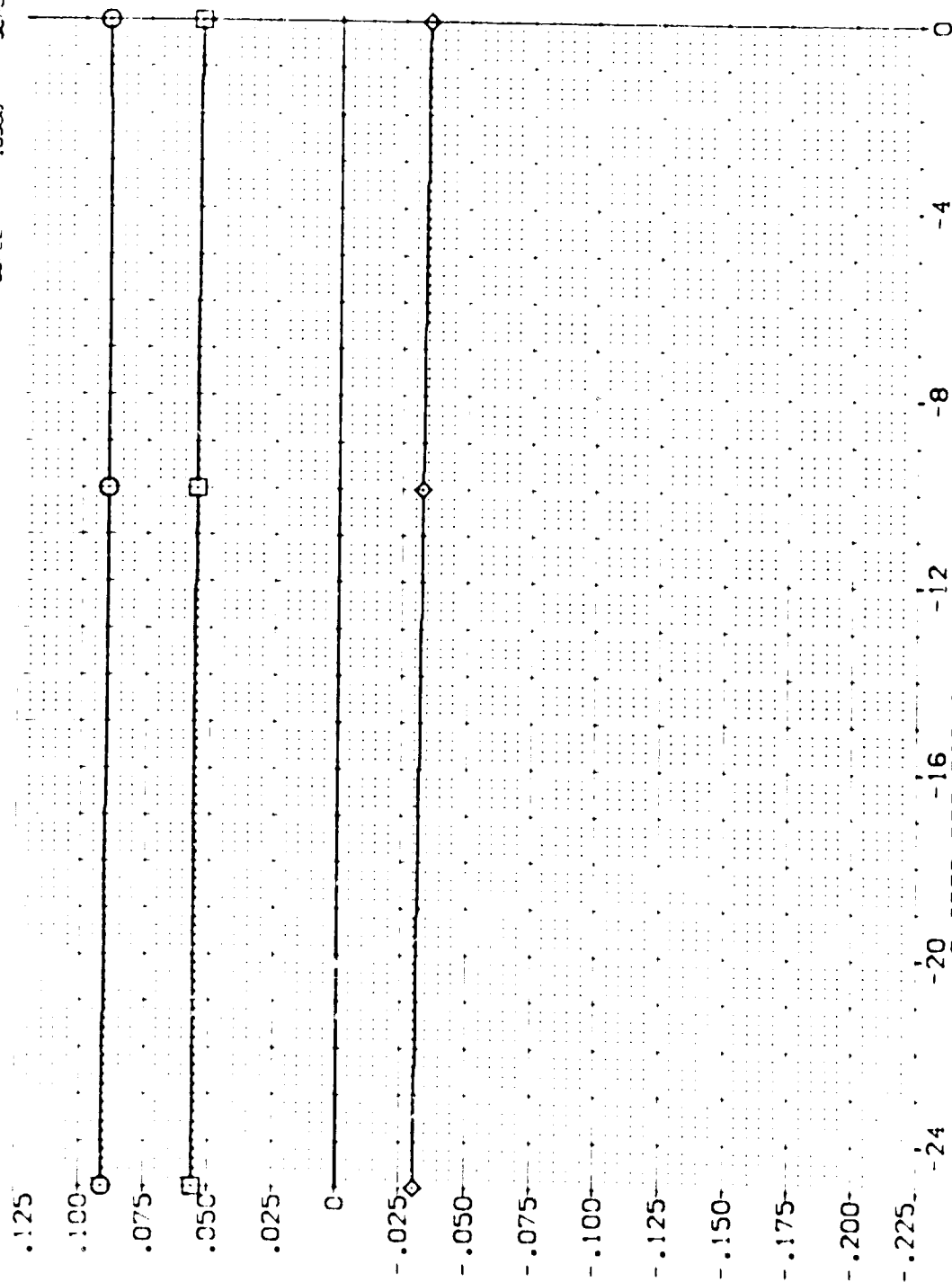
SYMBOL  
○ □ ◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BOF LAP  
ELEV-R

PARAMETRIC VALUES  
BETA .000  
AILRON .000  
SPOBRK 25.000  
ELEV-R .000

REFERENCE INFORMATION:  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XREF 32.3010  
YREF .0000  
ZREF 11.2500  
SCALE .0300



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CMET

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG  
PAGE 1101

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

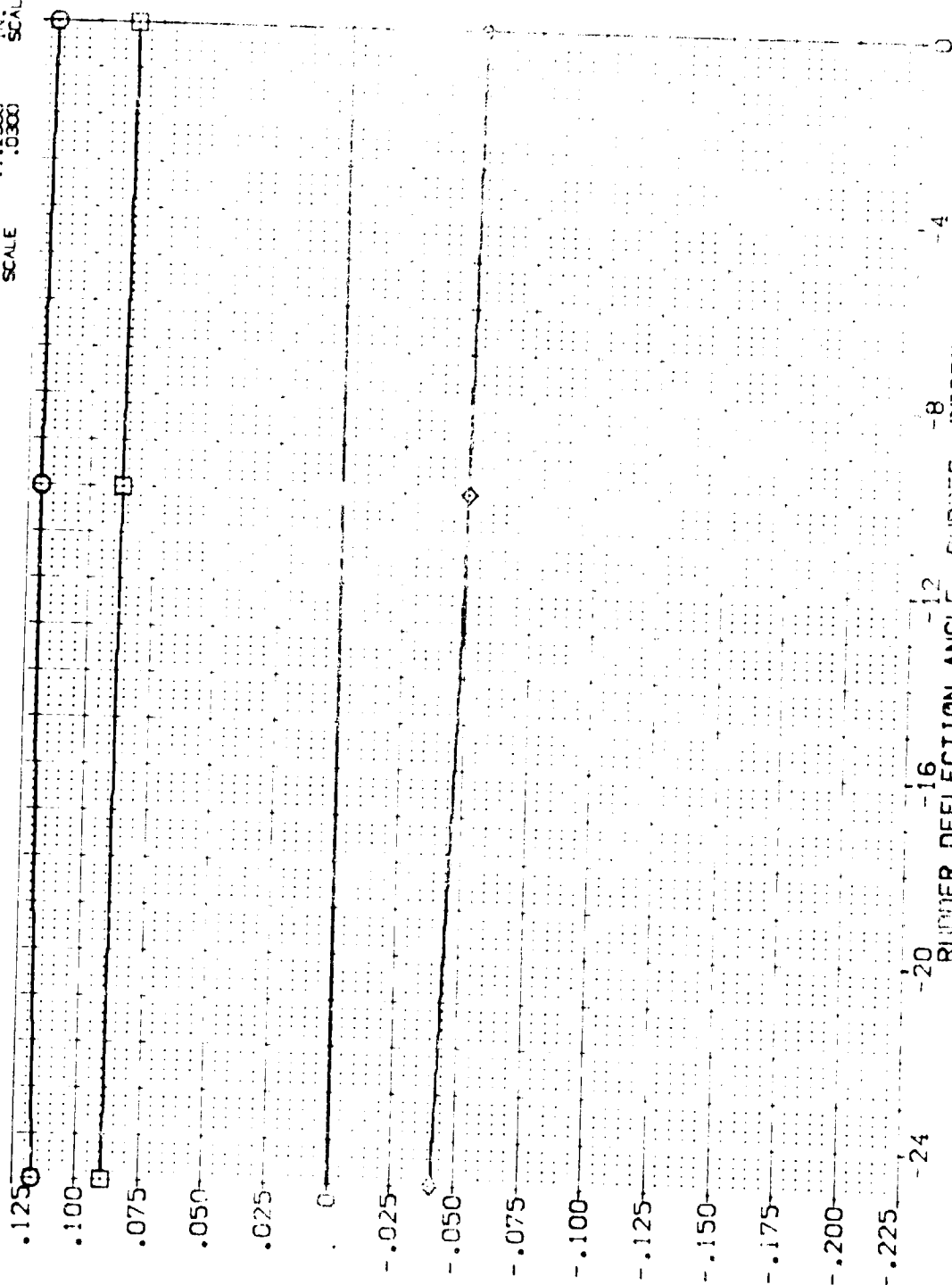
(EEJ032)

SYMBOL  
□ □ ◇

PARAMETRIC VALUES	
ALPHA	BETA
.000	.000
10.000	.000
20.000	.000
ELEVON	AILRON
BOFLAP	SPEEDBRAK
ELEV-L	ELEV-R
.000	.000
.000	.000
.000	.000
.000	.000

REFERENCE INFORMATION

SREF	2.4210	SQ.FT.
LREF	14.2440	IN.
SPREF	28.1004	IN.
XTRP	32.3010	IN.
YTRP	.0000	IN.
ZTRP	11.2500	IN.
SCALE	.0300	SCALE



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL

ALPHA	MACH	PARAMETRIC VALUES	REFERENCE INFORMATION
.000	1.050	BETA .000	SREF 2.4210
10.000	.000	AILRON .000	LREF 14.2440
20.000	-11.700	SPOBRK 25.000	BREF 28.1004
	ELEV-L .000	ELEV-R .000	XREF 32.3010
			YREF 11.0000
			ZREF 11.2500
			SCALE .0300

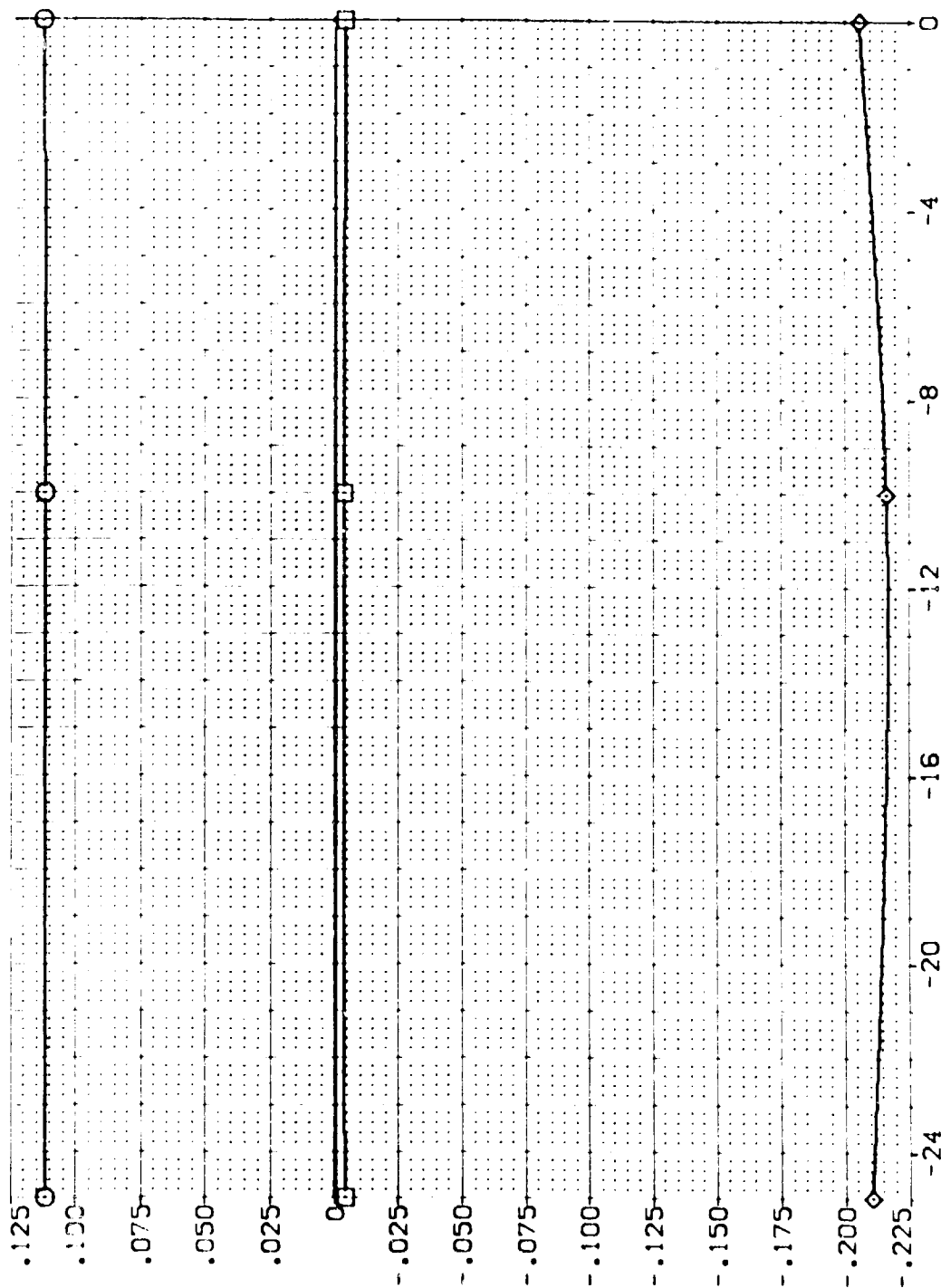


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

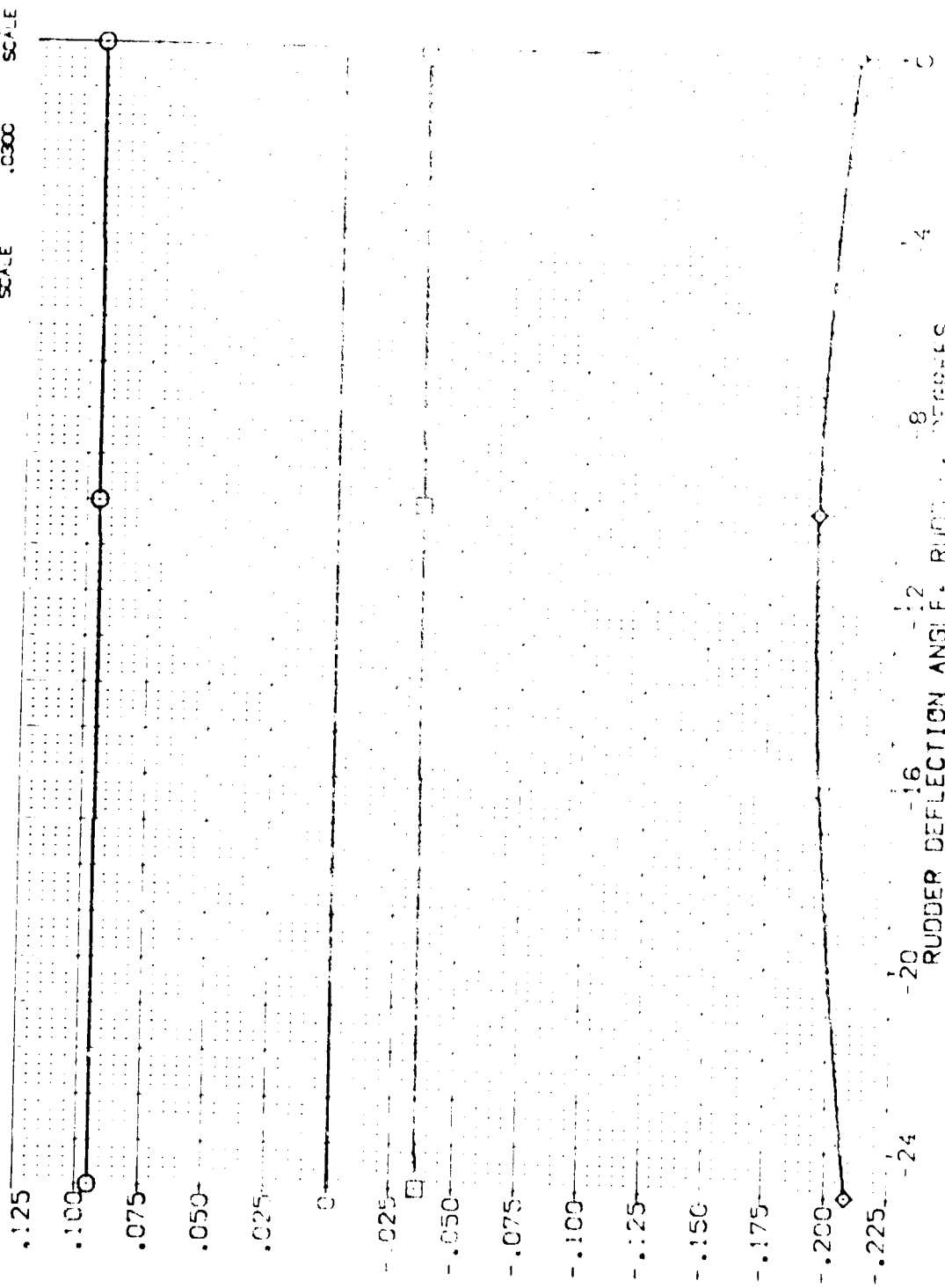
SYMBOL

ALPHA  
0.000  
10.000  
20.000

PARAMETRIC VALUES

MACH 1.200  
ELEVON .000  
BDFLAP -11.700  
ELEV-L .000  
BETA .000  
AILRON 25.000  
SPOBRK .000  
ELEV-R .000

REFERENCE INFORMATION  
SPREF 2.4210  
LPREF 14.2440  
BPREF 28.1004  
APREF 32.3010  
MPREF .0000  
ZMPREF 11.2500  
SCALE .0300



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT. SPEEDBRAKE = 25 DEG

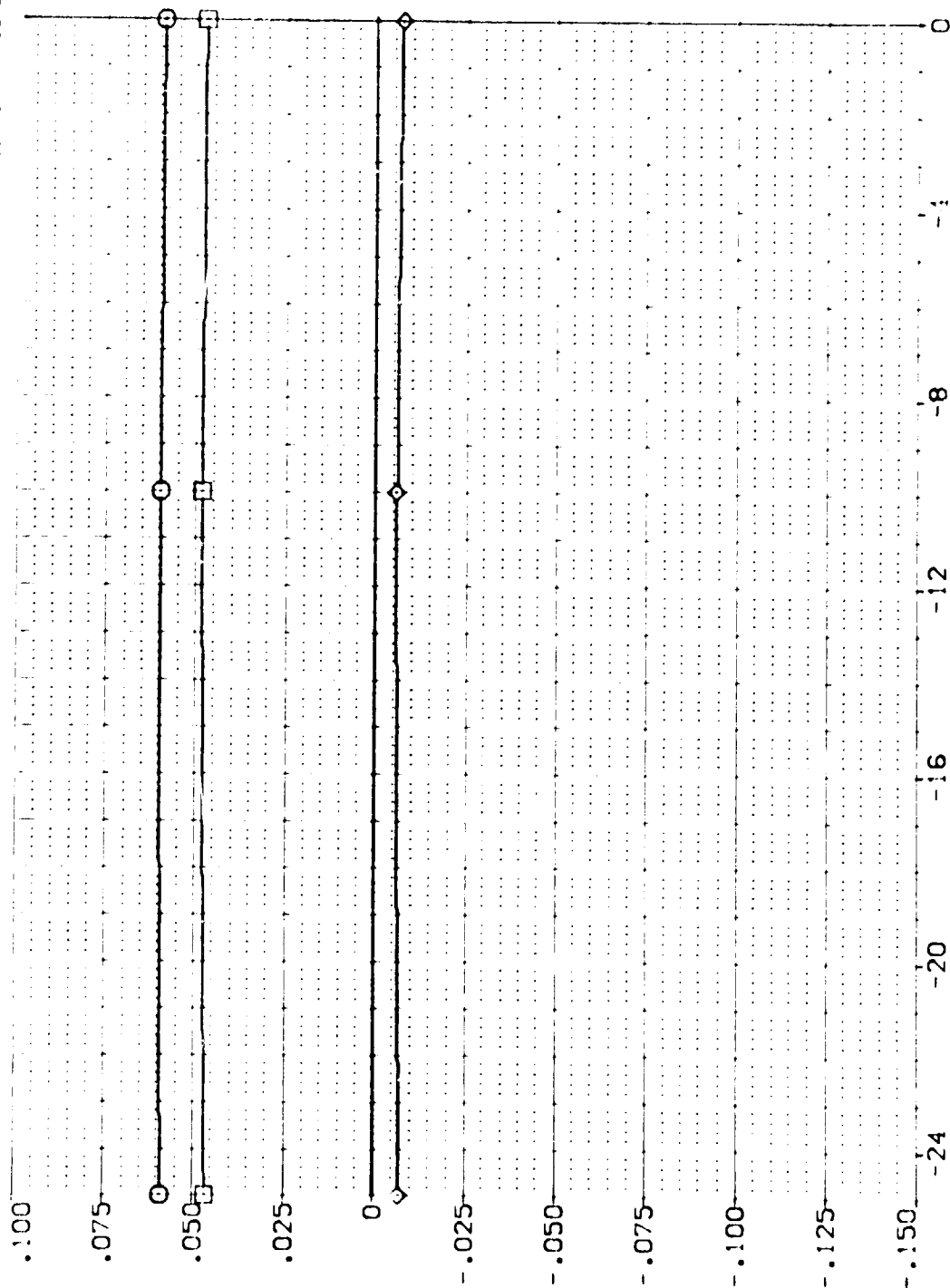
ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ032)

SYMBOL  
0.00

PARAMETRIC VALUES	
ALPHA	.000
MACH	.600
BETA	.000
ELEVON	.000
AILRON	.000
SPDRK	25.000
ELEV-L	.000
ELEV-R	.000

REFERENCE INFORMATION

SREF	2.4210	SQ. FT.
LREF	14.2440	
BREF	28.1304	
YREF	32.3010	
ZREF	11.2500	
SCALE	.0300	



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG  
PAGE 1:05

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

SYMBOL  
○ □ ◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BDF LAP  
ELEV-L

PARAMETRIC VALUES  
.800 BETA  
.000 AILRON  
-11.700 SPEEDRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ. FT.  
LREF 14.2440  
BREF 28.1004  
YREF 32.3010  
ZREF .0000  
ZMRP 11.2500  
SCALE 10300

INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

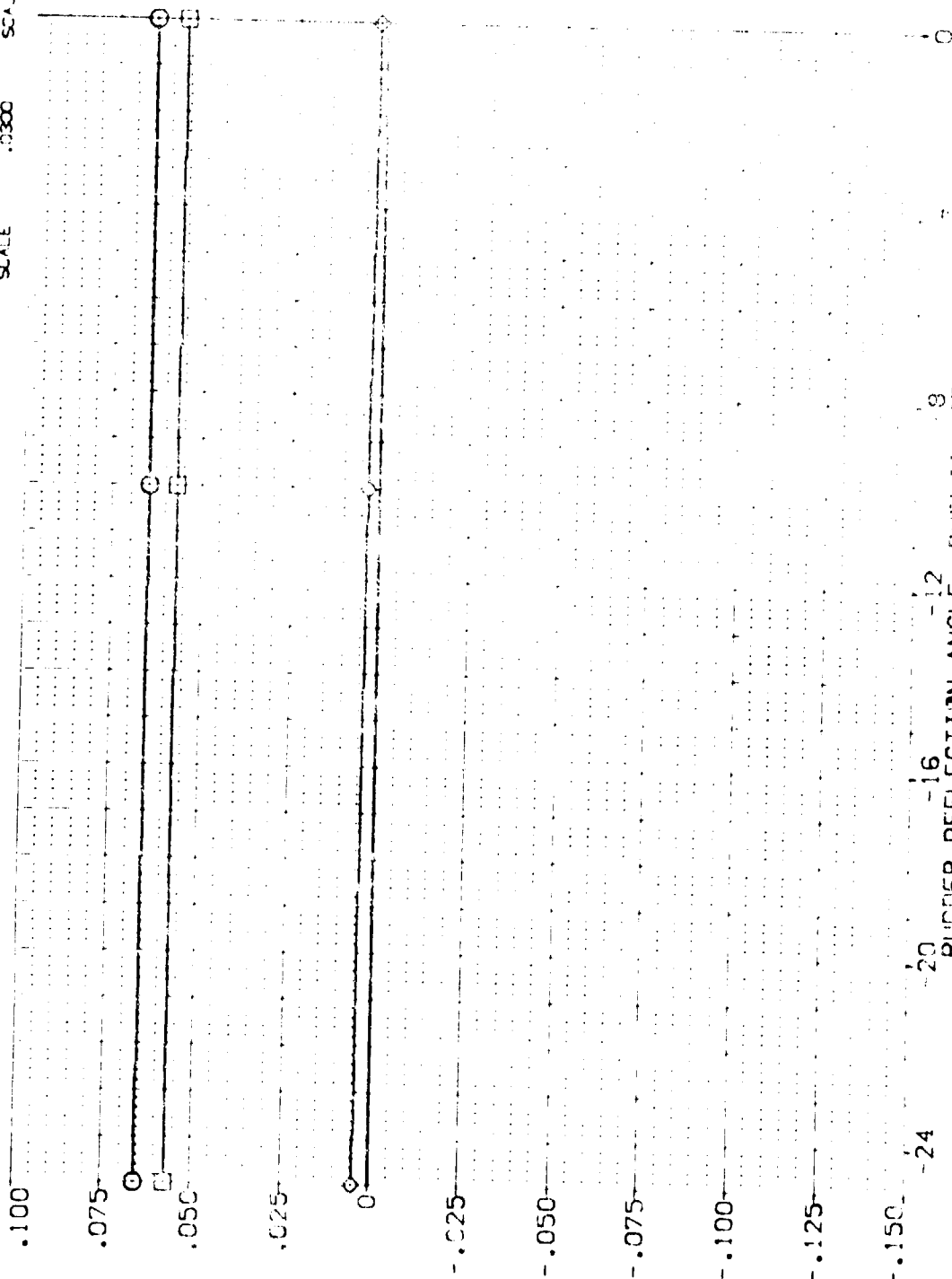


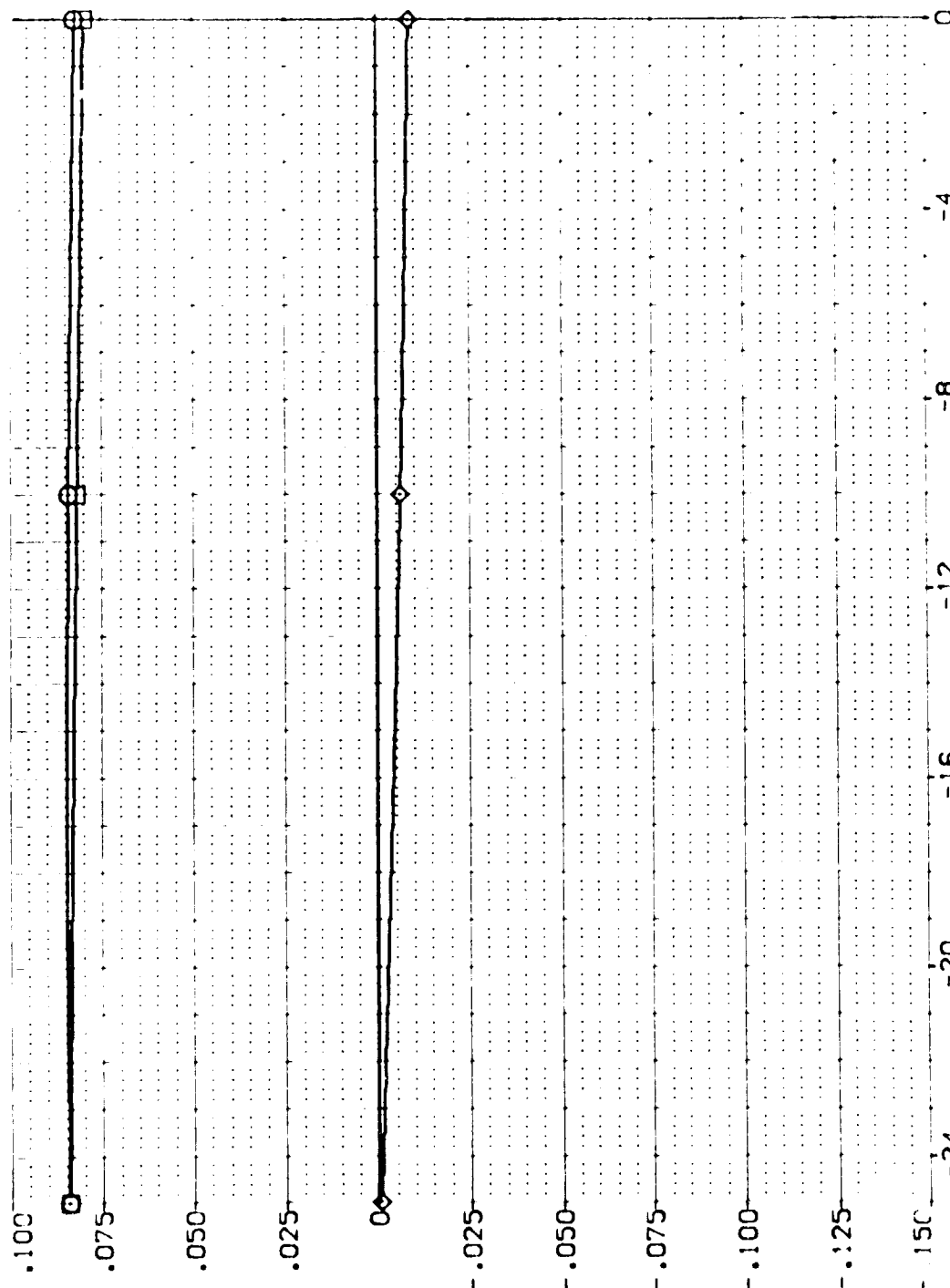
FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBRAKE = 25 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

SYMBOL  
 □ □ □  
 ◇

PARAMETRIC VALUES	
ALPHA	.000
MACH	.900
BETA	.000
ELEVON	.000
BOFLAP	25.000
SPEED	.000
ELEV-R	.000

REFERENCE INFORMATION	
SREF	2.4210
LRER	14.2440
BRER	28.1004
XRER	32.3010
YMRP	.0000
ZMRP	11.2500
SCALE	.0300



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG  
 PAGE 1107

ARC 11-747 0A53A B C M F W1 V 10° . RN/L (EEJ032)

SYMBOL ALPHA

PARAMETRIC VALUES	
MACH	BETA
10.000	.000
20.000	.000
ELEVON	AILRON
BDFLAP	25.000
ELEV-L	.000
ELEV-R	.000

REFERENCE INFORMATION

	SD. FT.
SREF	2.4210
SPREF	14.2440
BPREF	28.0000
XPREF	32.3010
YHREF	.0000
ZHREF	11.2500
SCALE	.0300

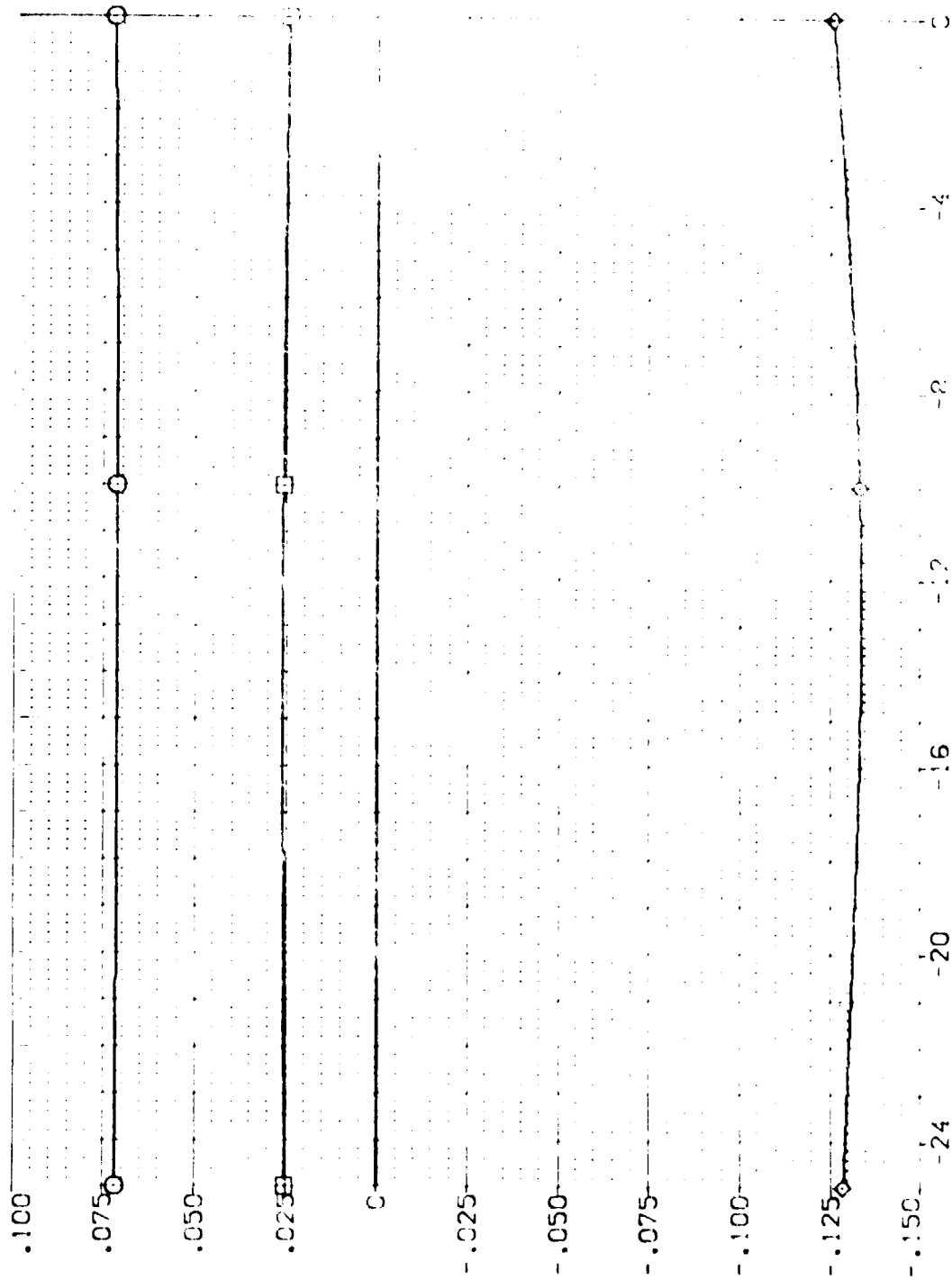


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBRAKE = 25 DEG

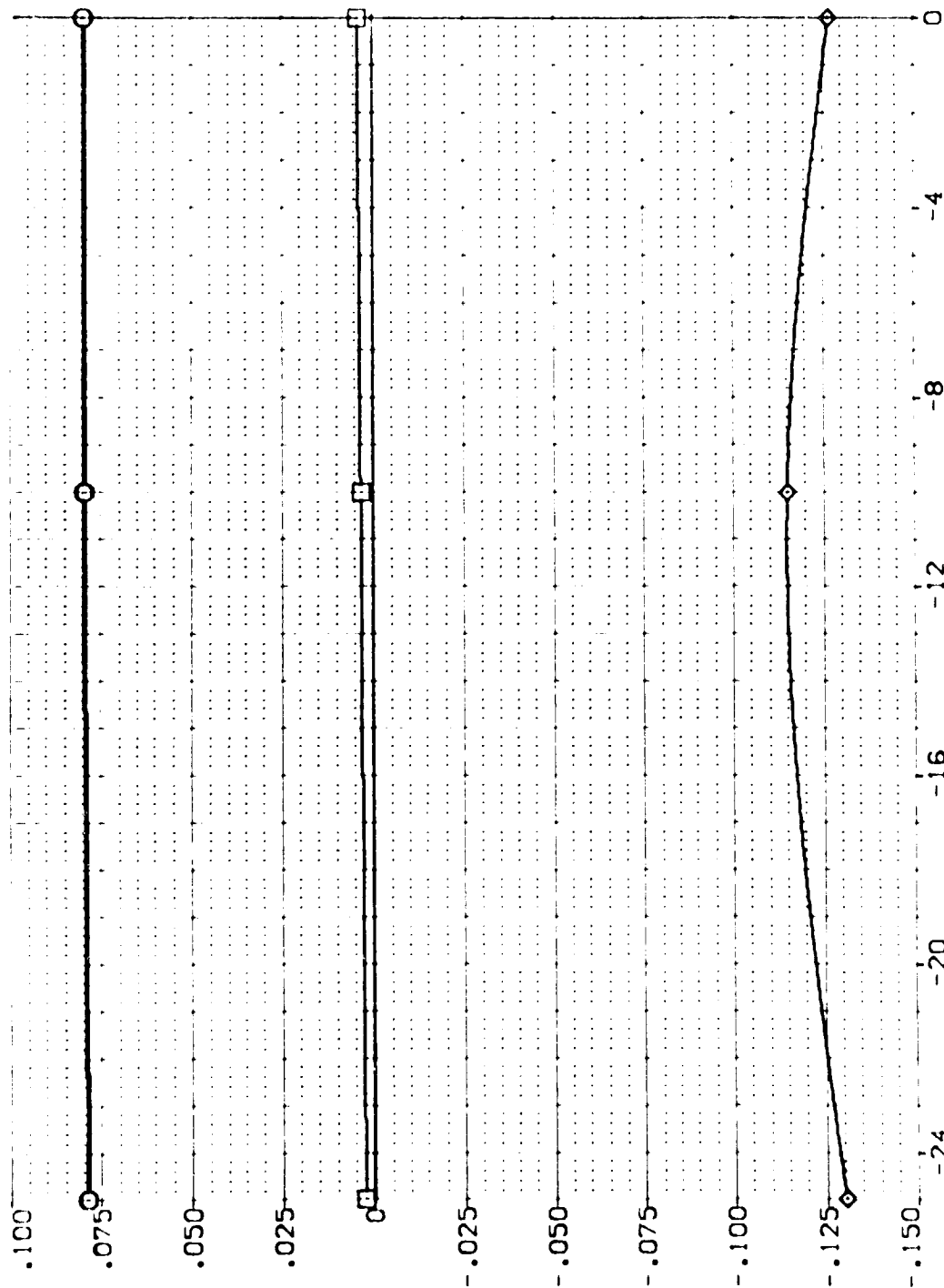


ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ032)

SYMBOL  
 O  
 diamond

PARAMETRIC VALUES  
 MACH 1.200 BETA .000  
 ELEVON .000 AILRON .000  
 BOFLAP -11.700 SPEEDBRK 25.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 BREF 28.1004  
 XMRP 32.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHeI

RUDDER DEFLECTION ANGLE, RUDDER, DEGREES

FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBRAKE = 25 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

**Synops**

0110

### PARAMETRIC VALUES

.000	MACH	.600	BETA	.000
10.000	ELEVON	.000	AILIRON	.000
20.000	BDFLAP	-11.700	SFOBRK	25.000
	ELEV-L	.000	ELEV-R	.000

REFERENCE INFORMATION		SO. FT.
SREF	2.42:0	IN.
LREF	14.2440	IN.
BREF	28.1004	IN.
XMRP	32.30:0	IN.
YMRP	.0000	IN.
ZMRP	11.2500	IN.
SCALE	.0300	SCALE

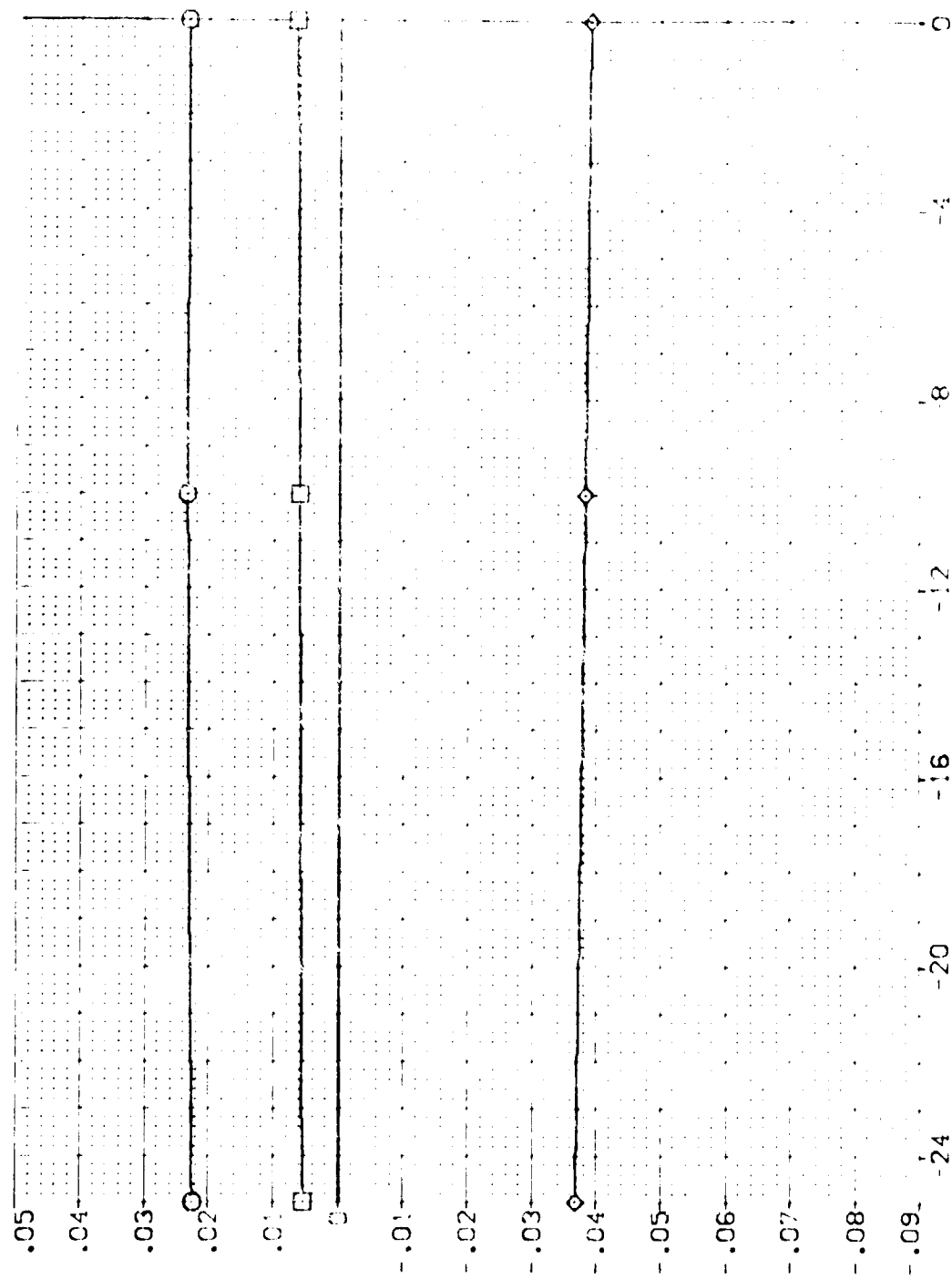
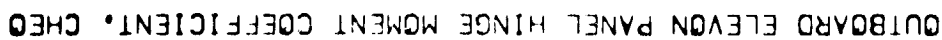


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

SYMBOL  
○ □ ◇

ALPHA  
.000  
10.000  
20.000

MACH  
1.000  
ELEVON  
20.000

PARAMETRIC VALUES  
BETA .000  
ALLRUP .000  
SPEEDK 25.000  
ELEV-R .000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2442  
BREF 28.1061  
XPRP 32.3010  
YPRP .0000  
ZPRP 11.2500  
SCALE .0003

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HED</sub>

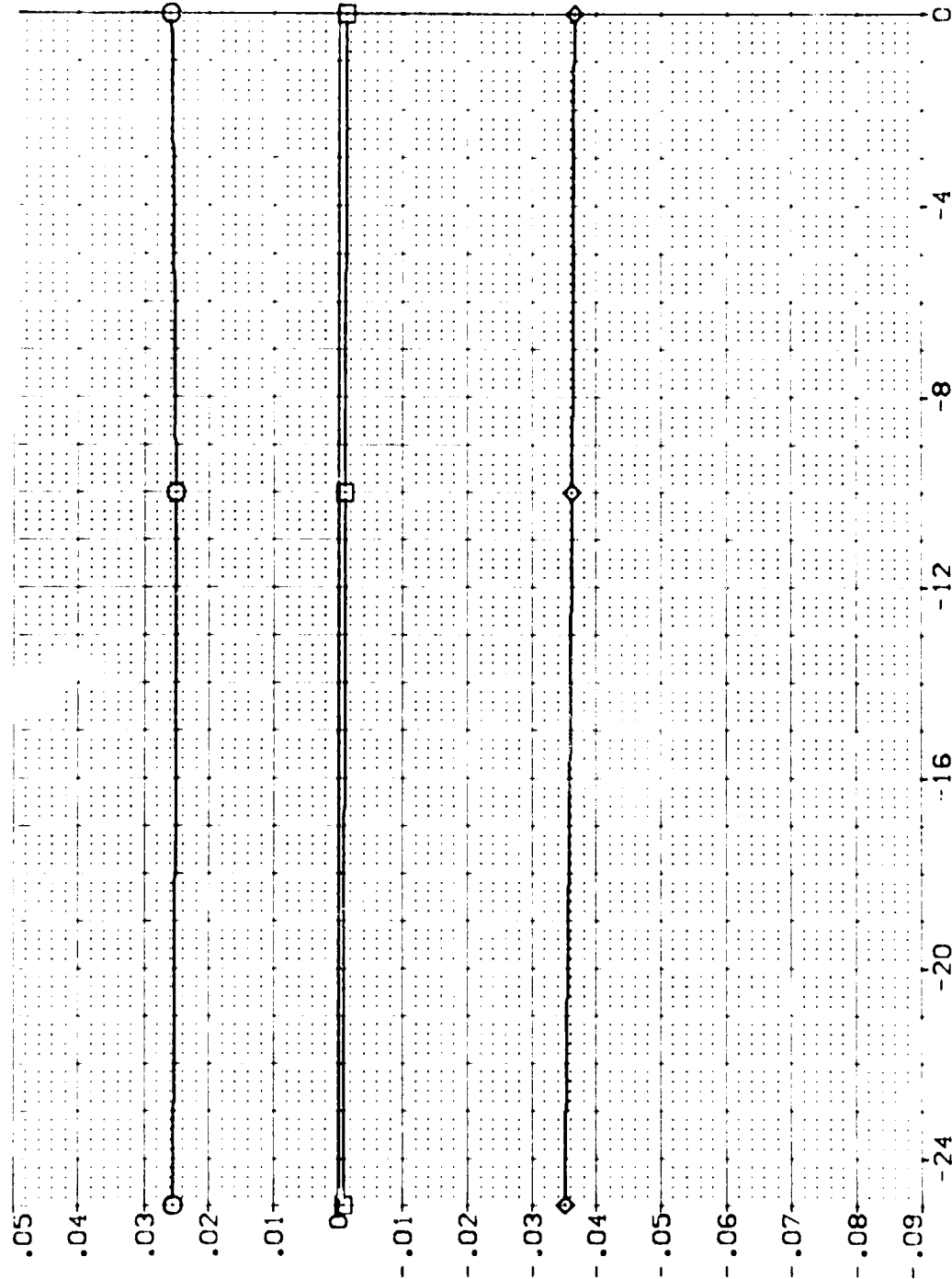


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 25 DEG  
PAGE 1111

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ032)

SYMBOL

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BDFLAP  
ELEV-L

PARAMETRIC VALUES  
.900 BETA  
.000 AILRON  
-11.700 SPEEDRK  
.000 ELEV-R

.000  
25.000  
.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP 0.0000  
ZMRP 11.2500  
SCALE .0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HED</sub>

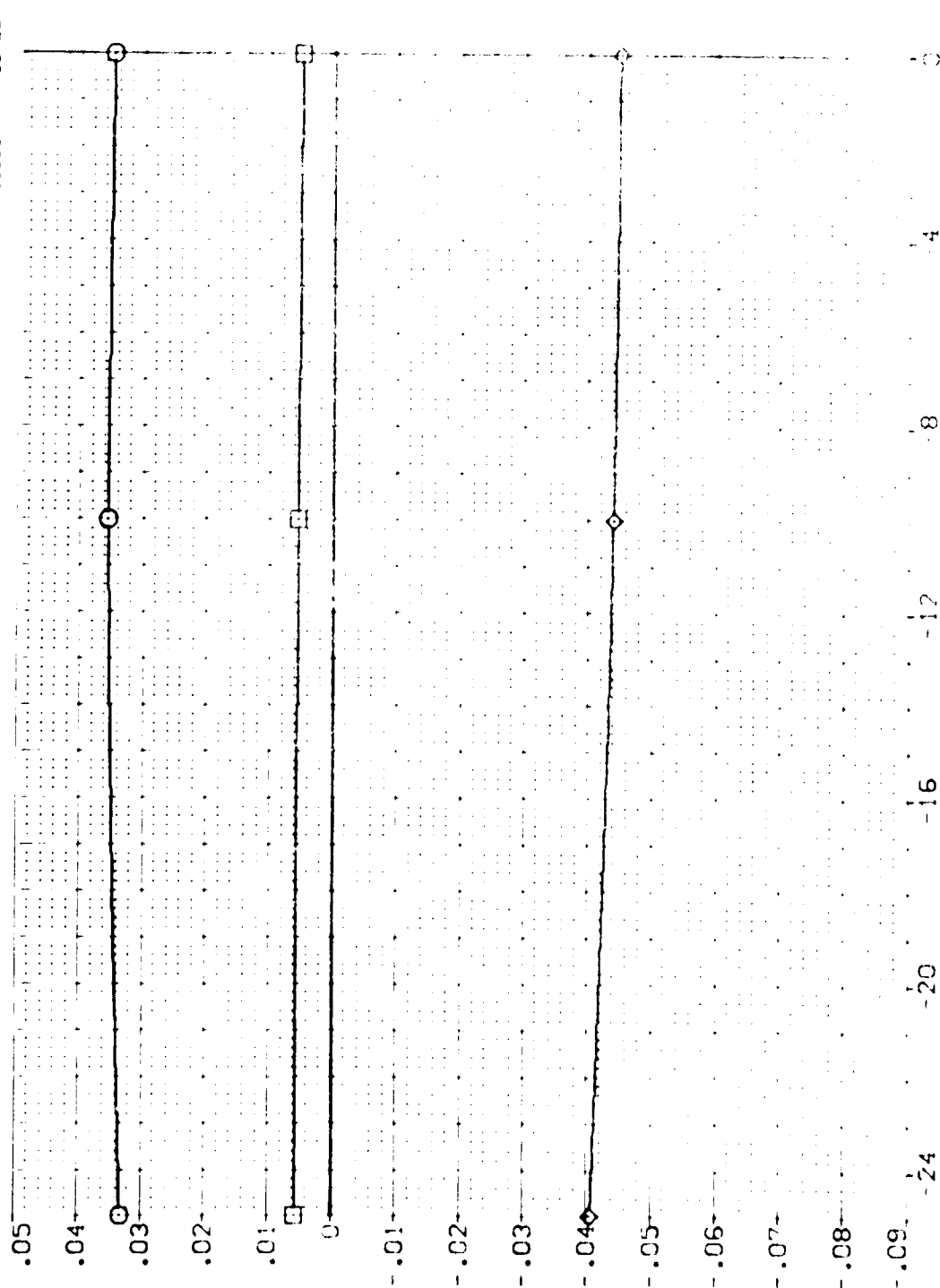


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W V NOM. RN/L

SYMBOL  
○  
◇

PARAMETRIC VALUES  
ALPHA .000 MACH 1.050 BETA .000  
10.000 ELEVON .000 AILRON .000  
20.000 BOFLAP -11.700 SPEEDBRK 25.000  
ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
VREF 32.3010  
WREF 11.2500  
SCALE .0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HED</sub>

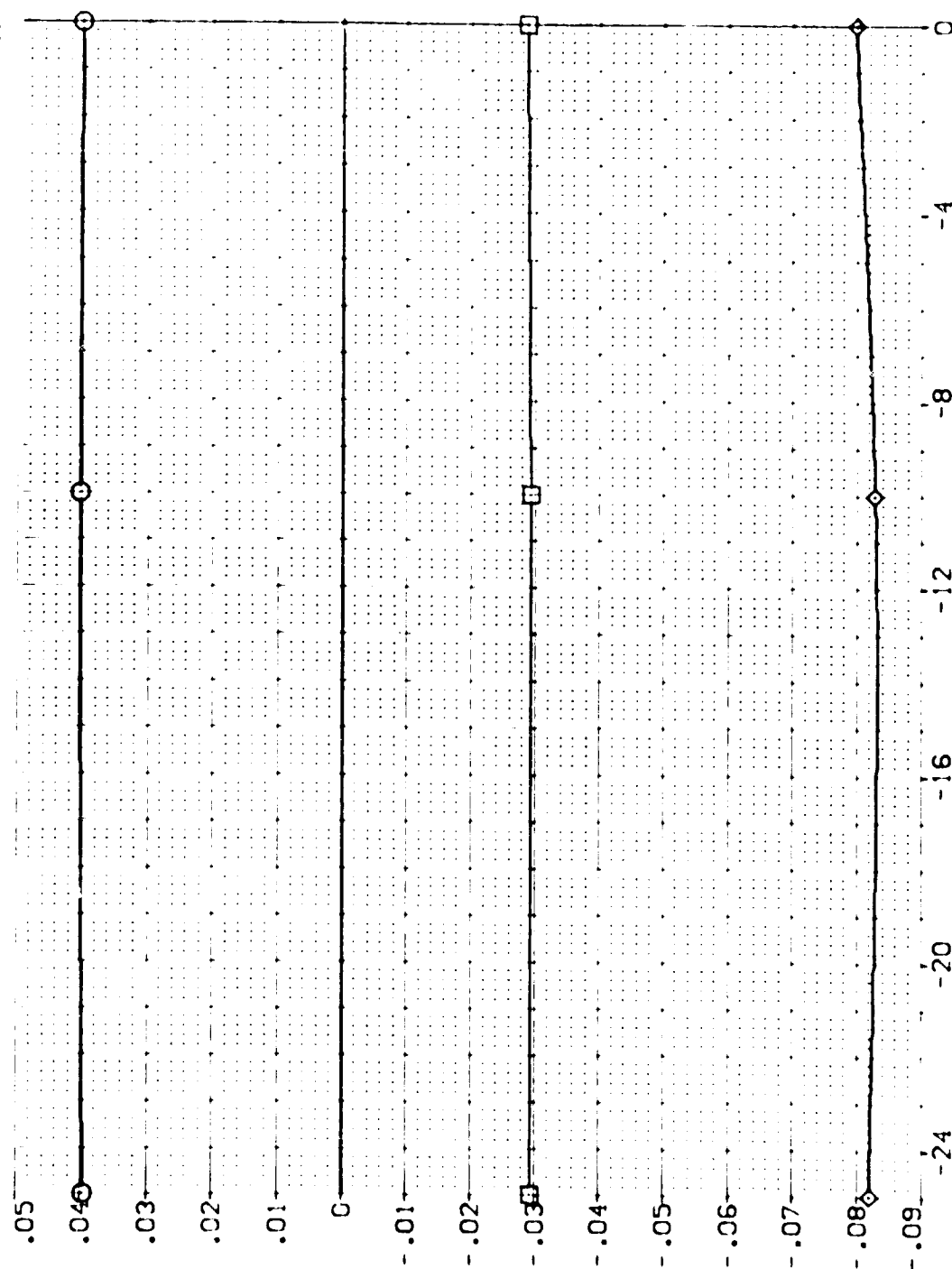


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

REFERENCE INFORMATION:  
 SPREF 2.4210 SQ.FT.  
 LPREF 14.244C  
 BPREF 28.100A  
 MPREF 32.301C  
 YMPREF .000C  
 ZMPREF 11.250C  
 SCALE .0300

PARAMETRIC VALUES  
 MACH 1.200 BETA .000  
 ELEVON .000 AILRON .000  
 BOFLAP -11.700 SPEEDBRK 25.000  
 ELEV-L .000 ELEV-R .000

SYMBOL  
 ○  
 ◇

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>H</sub>

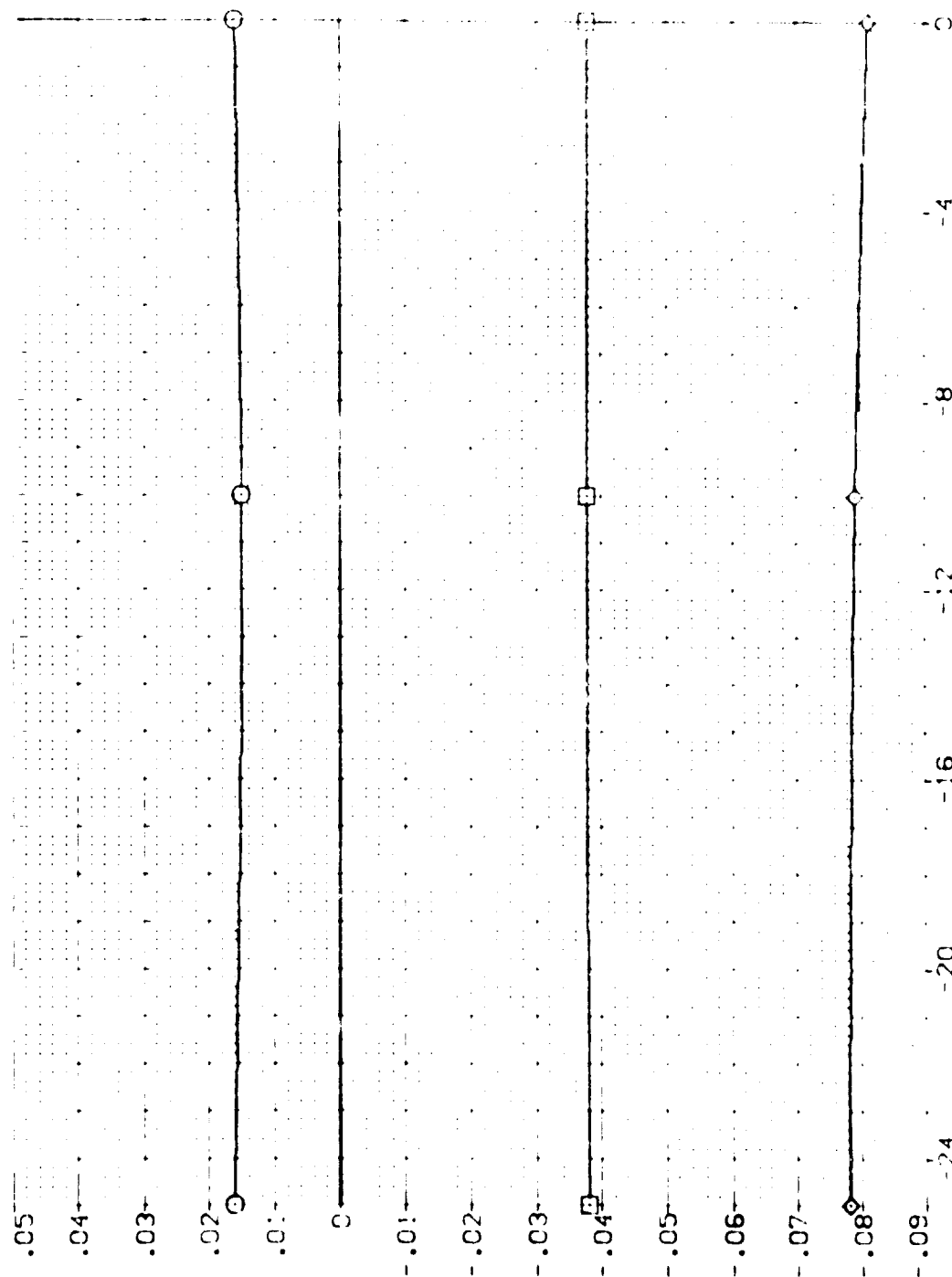


FIG. 40 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL ALPHA

PARAMETRIC VALUES	
.000	BETA
.000	ALPHA
.000	SPDRK
.000	ELEV-R
.000	ELEV-L

REFERENCE INFORMATION:

SREF	SC.F.T.
2.4210	
14.2440	
28.1000	
32.3010	
30.0000	
11.2500	
1.0000	

PARAMETRIC VALUES

ALPHA	BETA	ALPHA	SPDRK	ELEV-R	ELEV-L
.000	.000	.000	.000	.000	.000
.000	.000	.000	.000	.000	.000
.000	.000	.000	.000	.000	.000

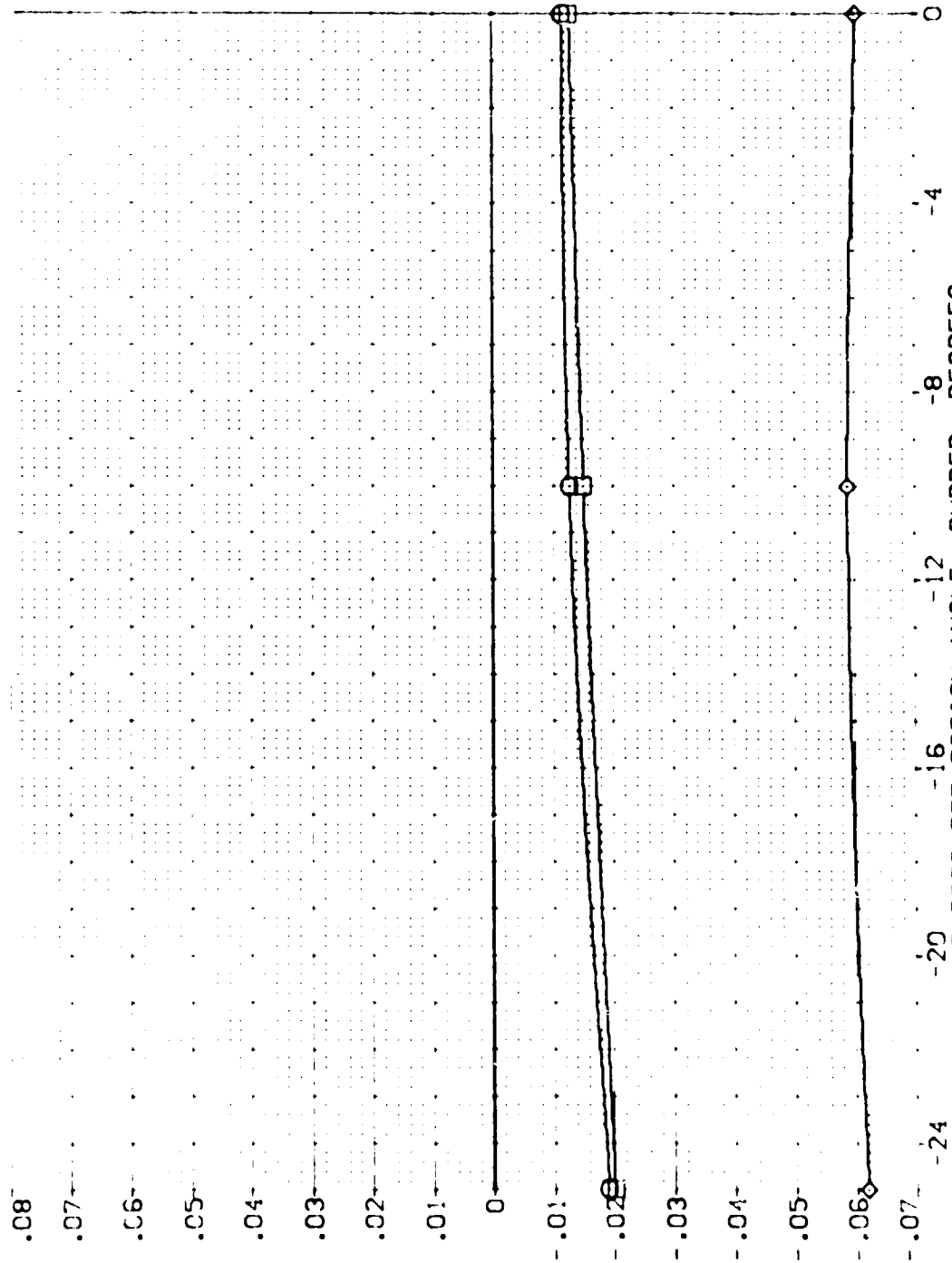


FIG. 41 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ○ □ ◇

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .800 BETA .000  
 ELEVON .000 AILRON .000  
 BOFLAP -11.700 SPEEDK 25.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

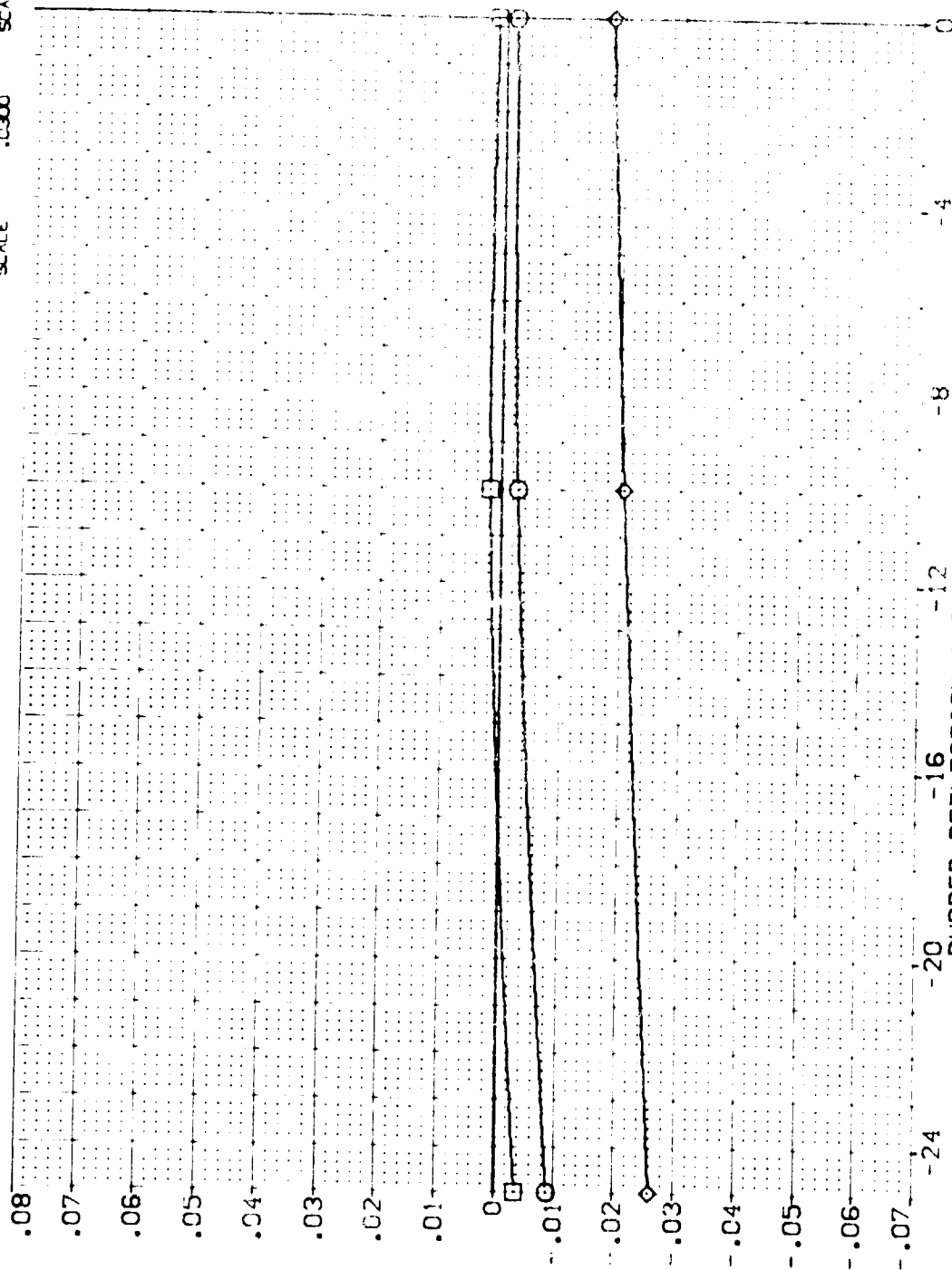


FIG. 41 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE = 25 DEG





(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
◇ □ ○

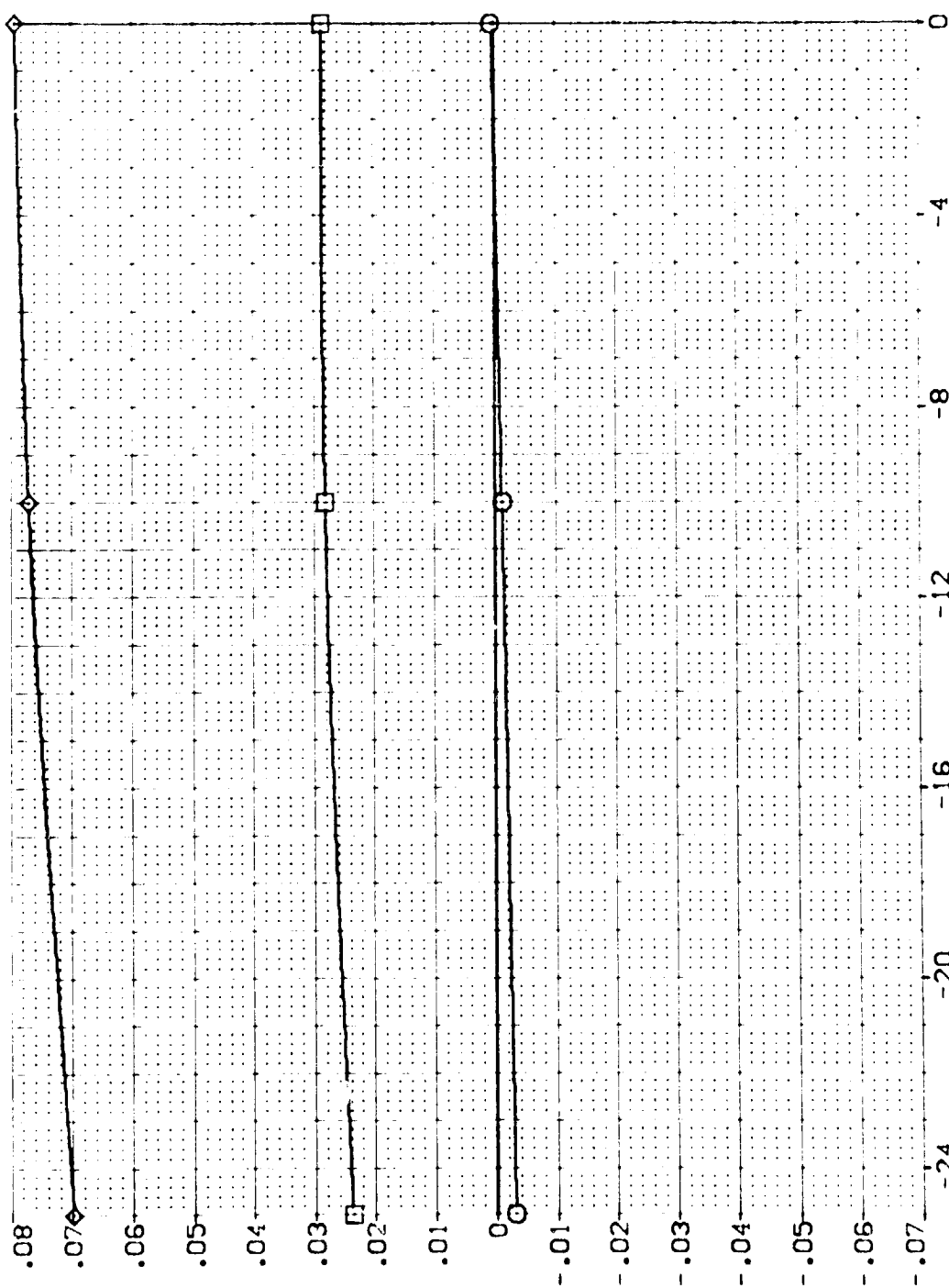
ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BDFLAP  
ELEV-L

PARAMETRIC VALUES  
BETA  
AILRON  
SPEEDRK  
ELEV-R

.000  
.000  
25.000  
.000

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
YARP 32.3010  
ZARP 11.0000  
SCALE 11.2500



BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

RUDDER DEFLECTION ANGLE, RUDDER, DEGREES

FIG. 41 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F W1 V NOM. RN/L

SYMBOL  
 ◇  
 □  
 ○

PARAMETRIC VALUES	
MACH	1.050
BETA	.000
ELEVON	.000
AILRON	.000
BOFLAP	-11.700
SPOBRK	25.000
ELEV-L	.000
ELEV-R	.000

REFERENCE INFORMATION	
SREF	2.4210
LREF	14.2440
BREF	28.1004
XMRP	32.3010
YMRP	.0000
ZMRP	11.2500
SCALE	.0300

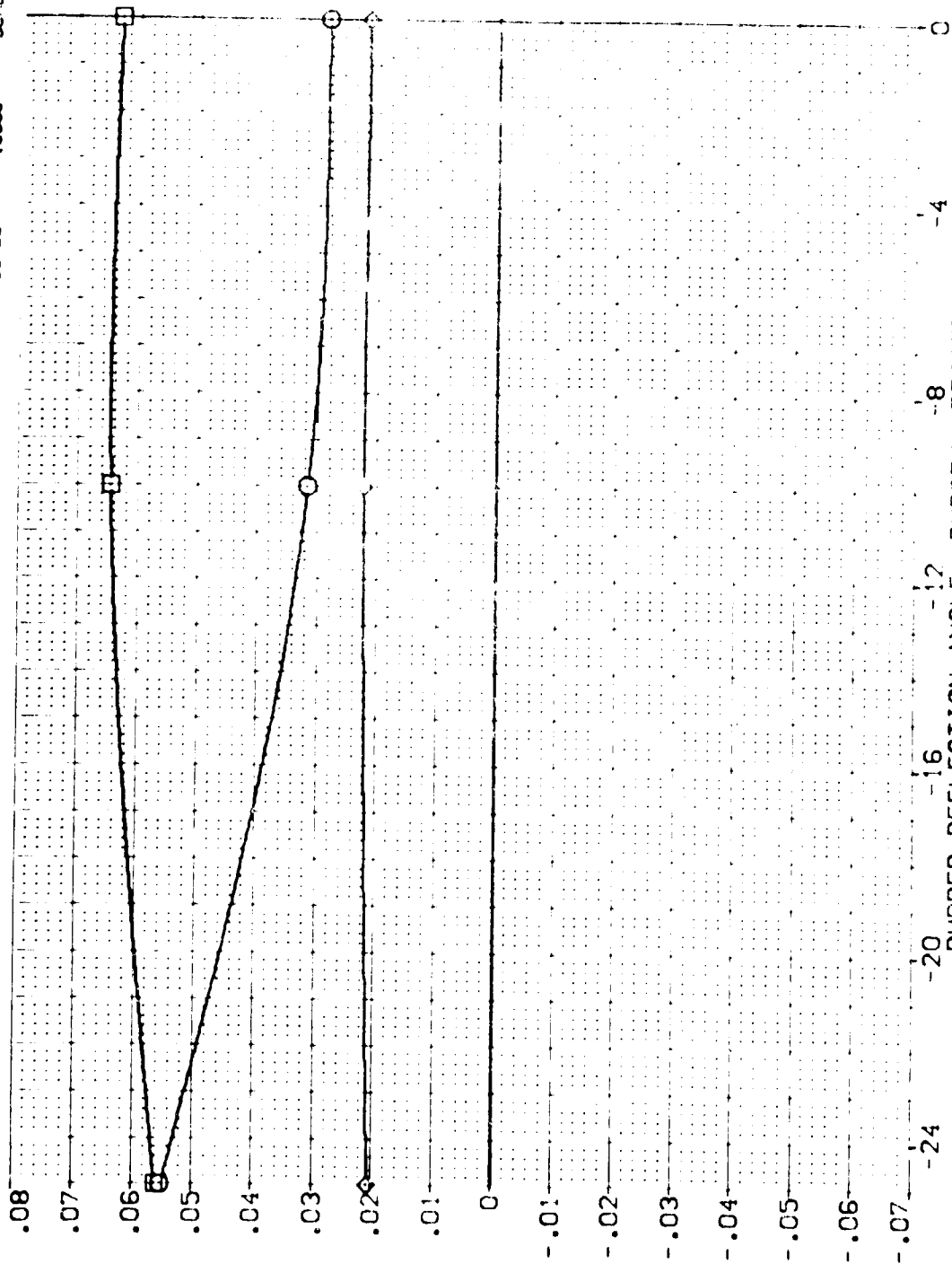


FIG. 41 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGE MOMENT, SPEEDBRAKE = 25 DEG

(EEJ032)

ARC 11-747 0A53A B C M F #1 V NOM. RN/L

SYMBOL  
 ○ □ ◇

PARAMETRIC VALUES  
 ALPHA .000 MACH 1.200 BETA .300  
 10.000 ELEVON .000 AILRON .000  
 20.000 BOFLAP -11.700 SPEEDRK 25.000  
 ELEV-L .000 ELEV-R .000

BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

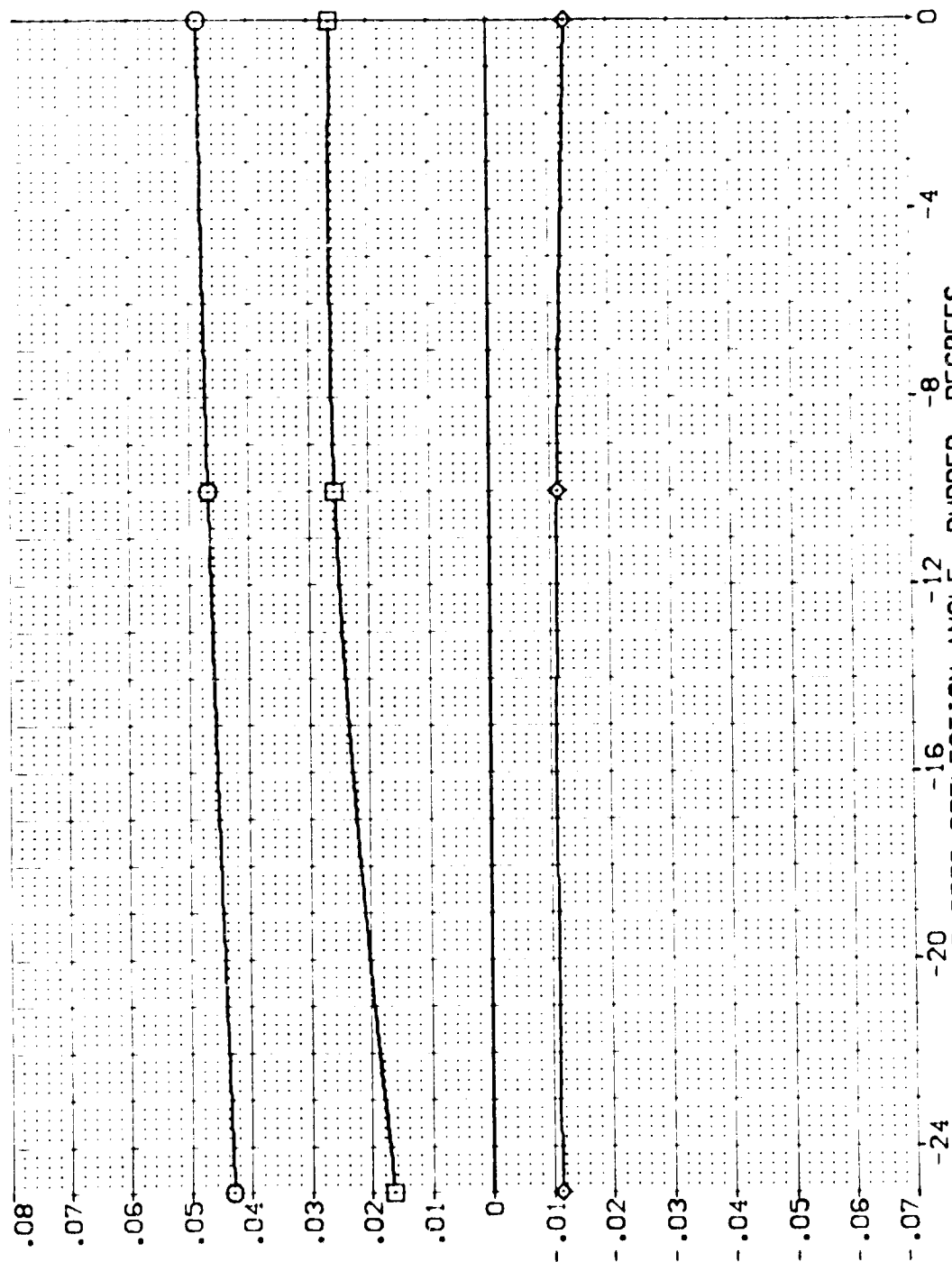


FIG. 41 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE = 25 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
	.000	.600	BETA	DATA SET	SREF
	10.000	-10.000	BOFLAP	EEJ002	UREF
	20.000	25.000	RUDER	EEJ021	UREF
		-10.000	ELEV-R		YMRP
					ZMRP
					SCALE
					IN.
					SCALE

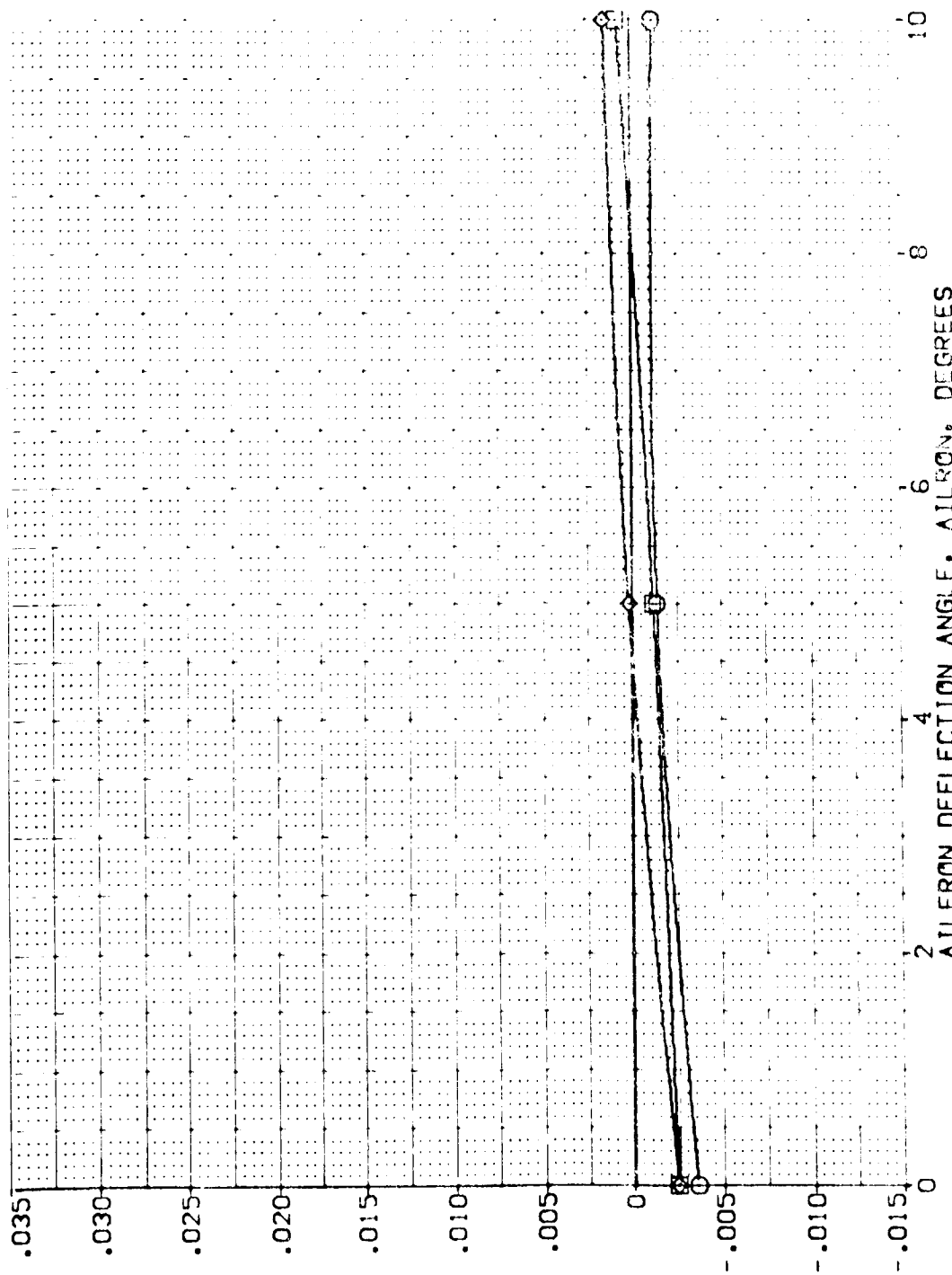


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMOMENT



ARC 11-747 0A53A B C M F W1 V NM. RN/L (EEJ002)

SYMBOL  
□ ○ ◇

ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH .900  
ELEVON -10.000  
SPOBRK 25.000  
ELEV-L -10.000

BETA  
BDFLAP  
RUDDER  
ELEV-R

DATA SOURCE  
AILRON  
DATASET  
EEJ002  
EEJ021

DATASET  
EEJ005

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
REF 14.7440  
BREF 28.000  
X-REF 32.0010  
Y-REF .0000  
Z-REF 11.7500  
SCALE .0300

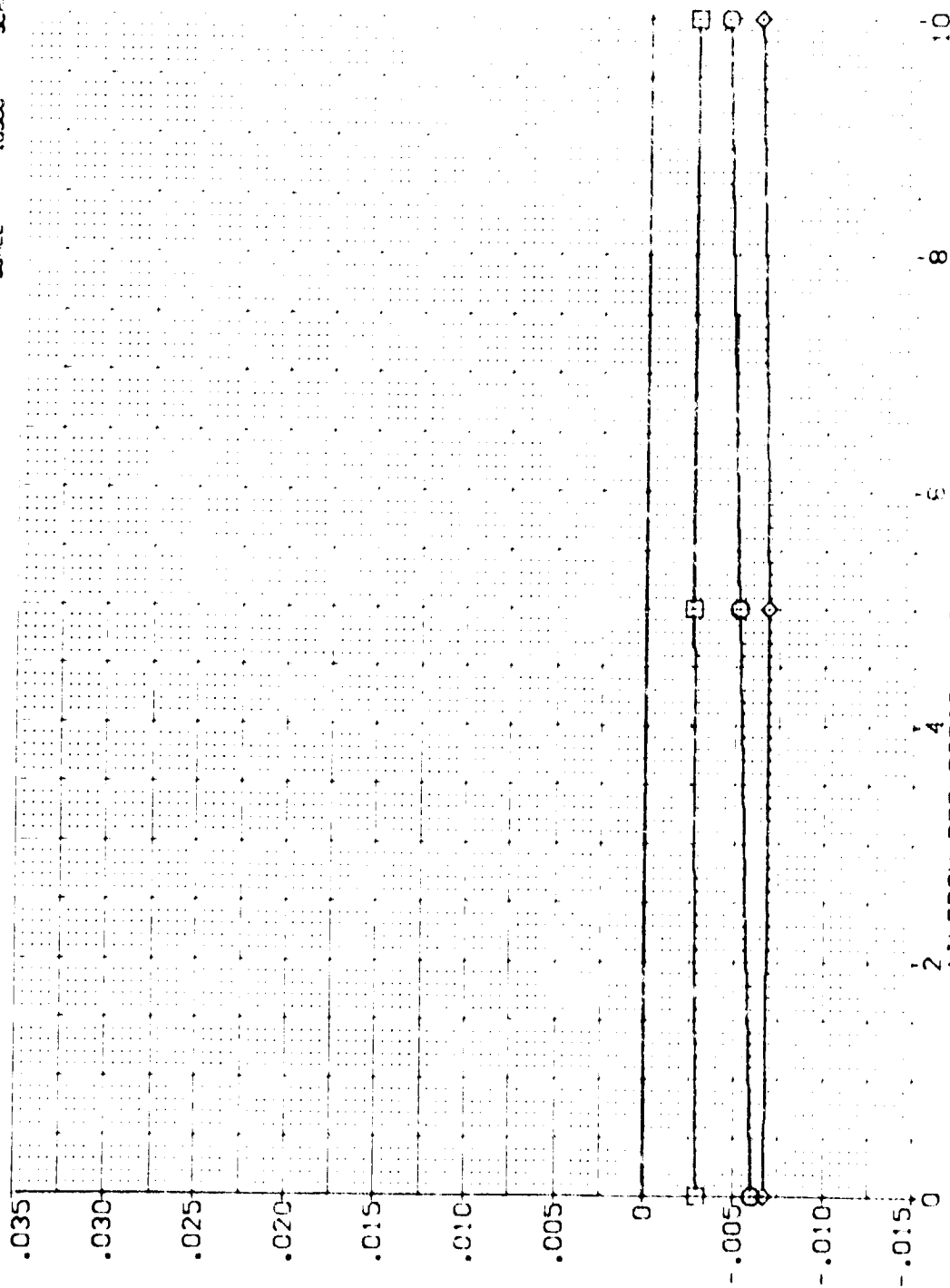


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT



SYMBOL	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
	ALPHA	MACH	BETA	BOFLAP	BOFLAP	BOFLAP	REF	REF	REF	SCALE
□	.000	1.200	1.000	-10.000	BOFLAP	BOFLAP	REF	REF	REF	SCALE
□	10.000	ELEVON	-10.000	25.000	RUDER	RUDER	REF	REF	REF	SCALE
◇	20.000	ELEV-L	-10.000	-10.000	ELEV-R	ELEV-R	REF	REF	REF	SCALE

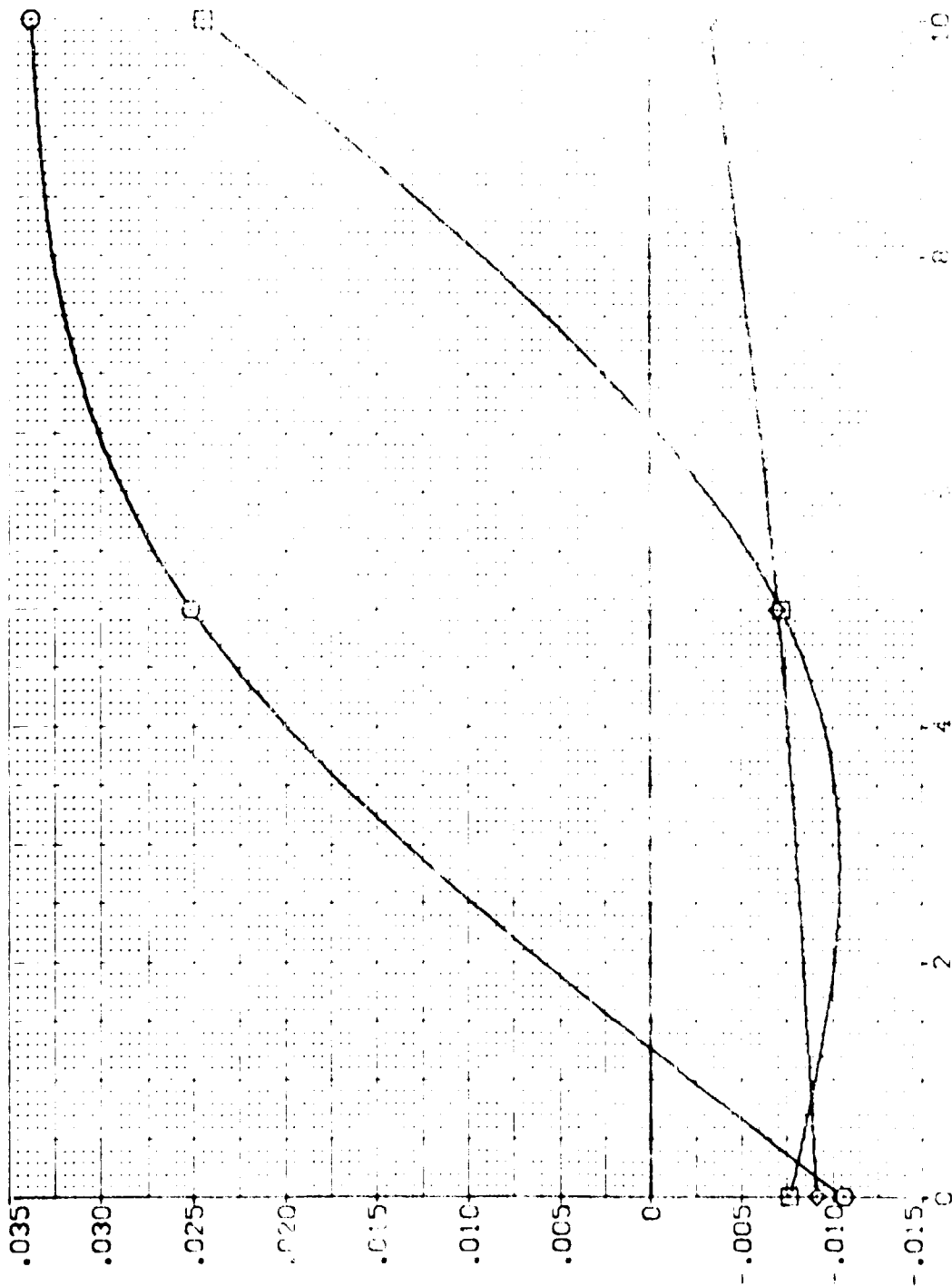


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT





ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	BETA .800	AILRON	SREF 2.4210 SQ. FT.
□	10.000	BOFLAP -10.000	EEJ005 5.000	LREF 14.2440
◇	20.000	RUDDER 25.000	10.000	BREF 28.1004
		ELEV-R -10.000		XMRP 32.3010
				YMRP .0000
				ZMRP 11.2500
				SCALE .0300

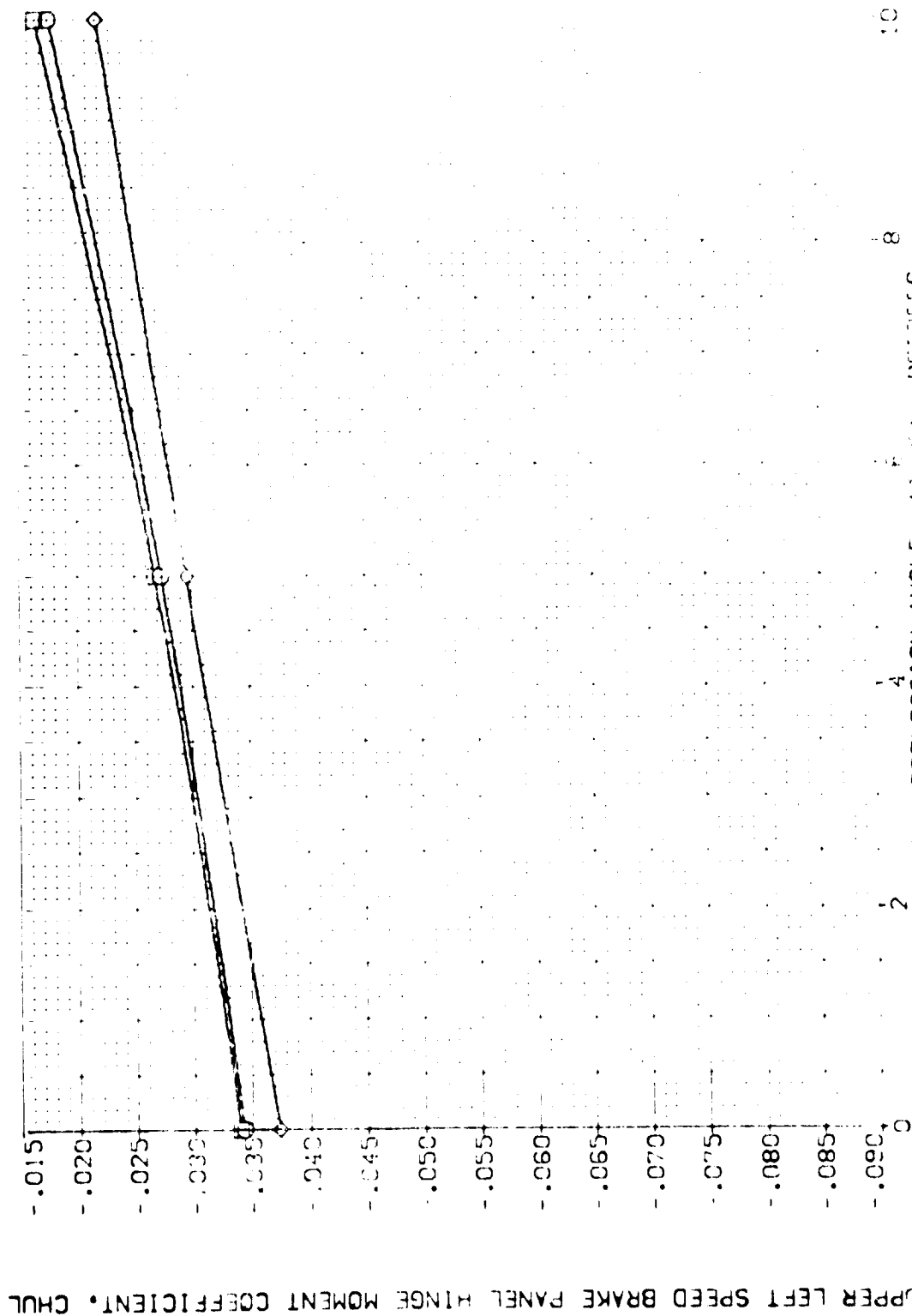


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

(EEJ002)

**obus**

ALL DATA  
10.00  
20.00

W.D. 3-3

PARAMETRIC VALUES	BETA	BOFAP	POWER	POWER
.900				
-10.000				
25.000				
10.000				

DATA SOURCE  
NIPON  
10.000  
10.000

```
DATASET ALLOC=5,000  
EEJ005  
SPR  
X  
SPR  
X  
X  
Y  
Y  
S
```

REFERENCE INFORMATION:

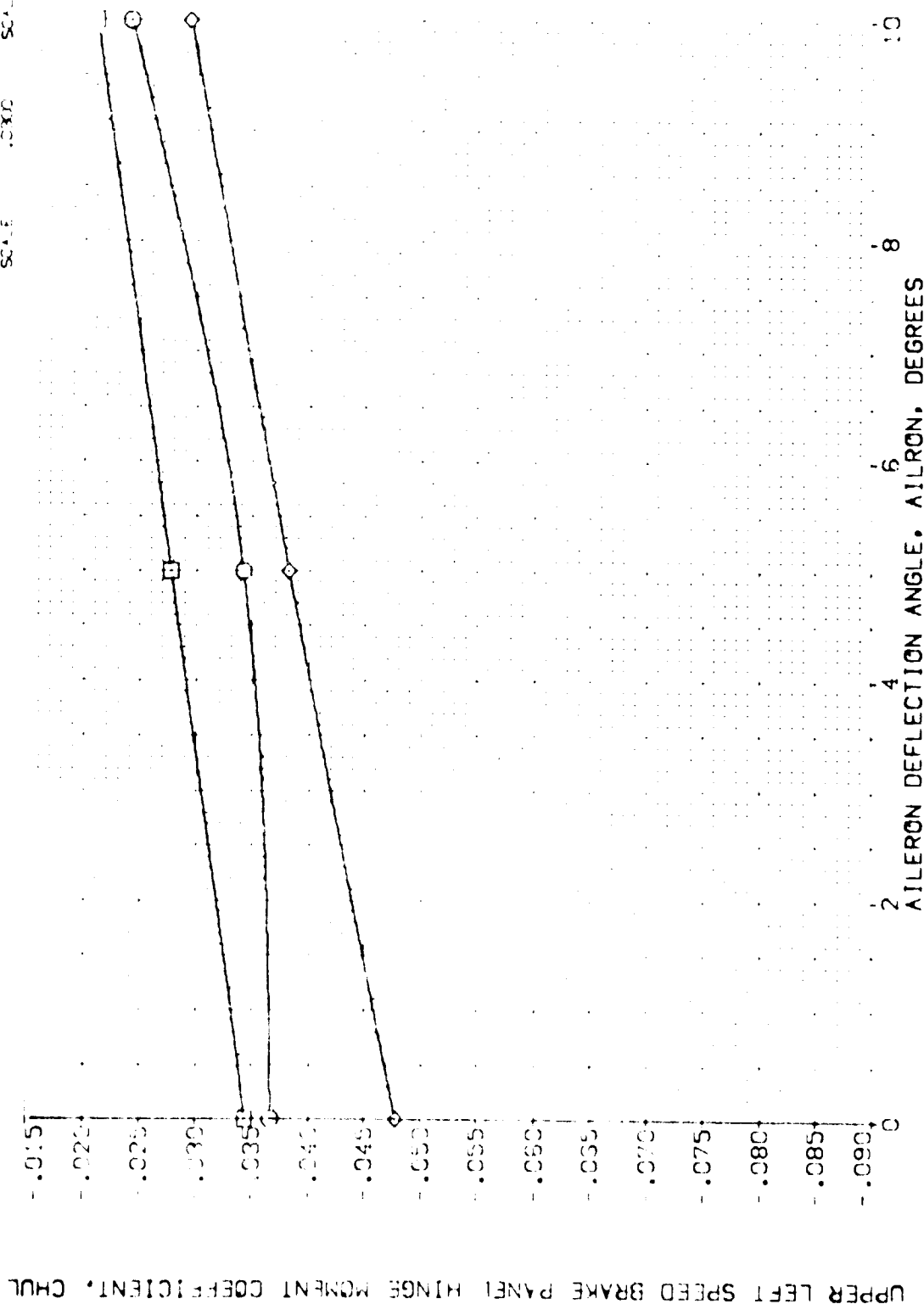


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMOMENT

ARC 11-747 OAS3A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
◇	.000	1.050	BETA	AILRON	SREF 2.4210
◇	10.000	-10.000	BOFLAP	EEJ002	LREF 14.2440
◇	20.000	25.000	RUDDER	EEJ001	BREF 28.1004
		-10.000	ELEV-R		XMRP 32.3010
			ELEV-L		YMRP .0000
					ZMRP .0000
					SCALE 11.0000
					SCALE

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

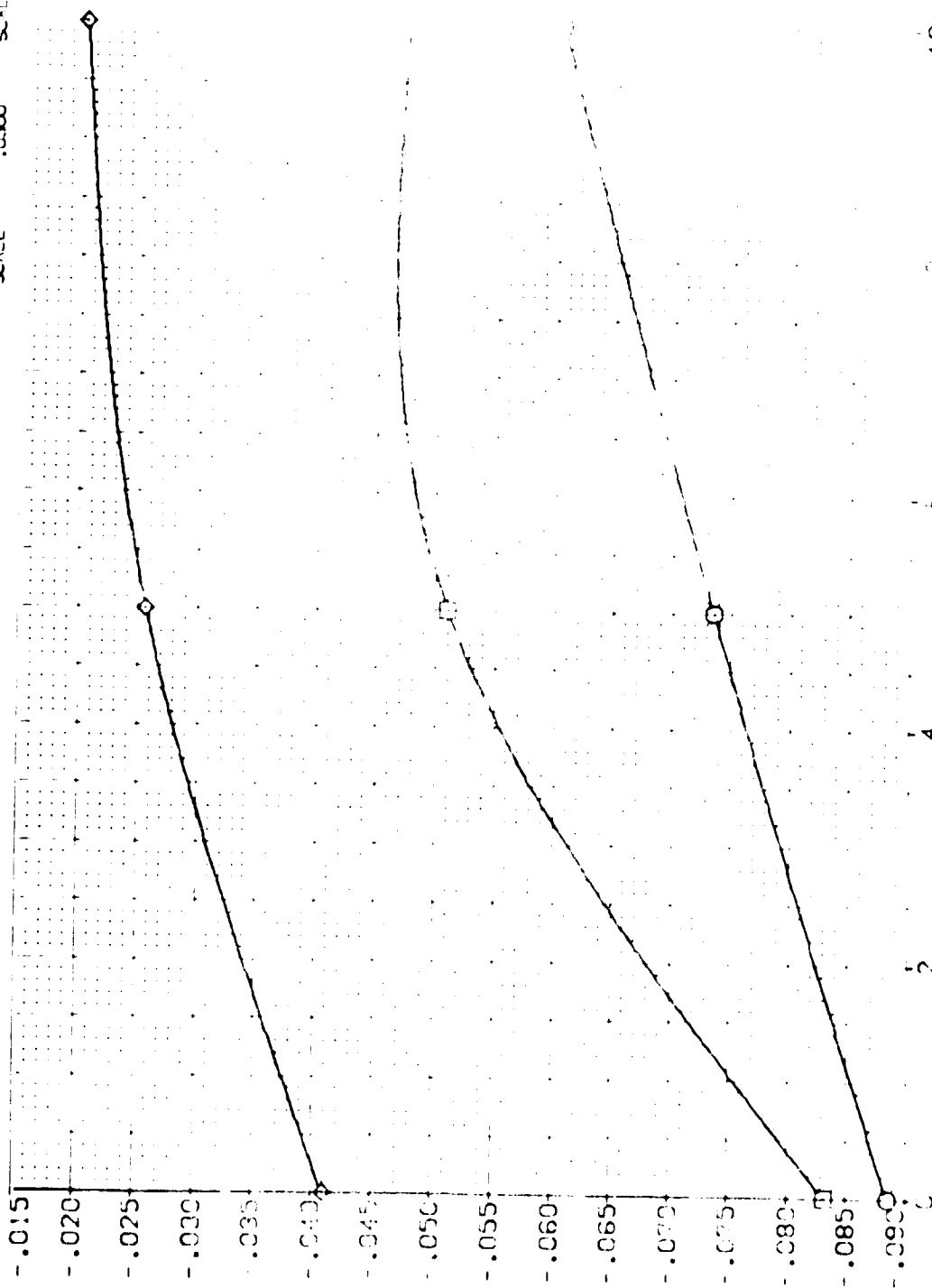


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGE MOMENT

ARC 11 747 0A534 B C M F W1 V NOM. RV/L (EEJ002)

SYMBOL

ALPHA

PARAMETRIC VALUES

DATA SOURCE

DATASET

REFERENCE INFORMATION

0.000  
10.000  
20.000

MACH  
0.79  
0.85

1.000  
10.000  
20.000  
30.000  
40.000  
50.000

0.000  
10.000  
20.000  
30.000  
40.000  
50.000

0.000  
10.000  
20.000  
30.000  
40.000  
50.000

0.000  
10.000  
20.000  
30.000  
40.000  
50.000

0.000  
10.000  
20.000  
30.000  
40.000  
50.000

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

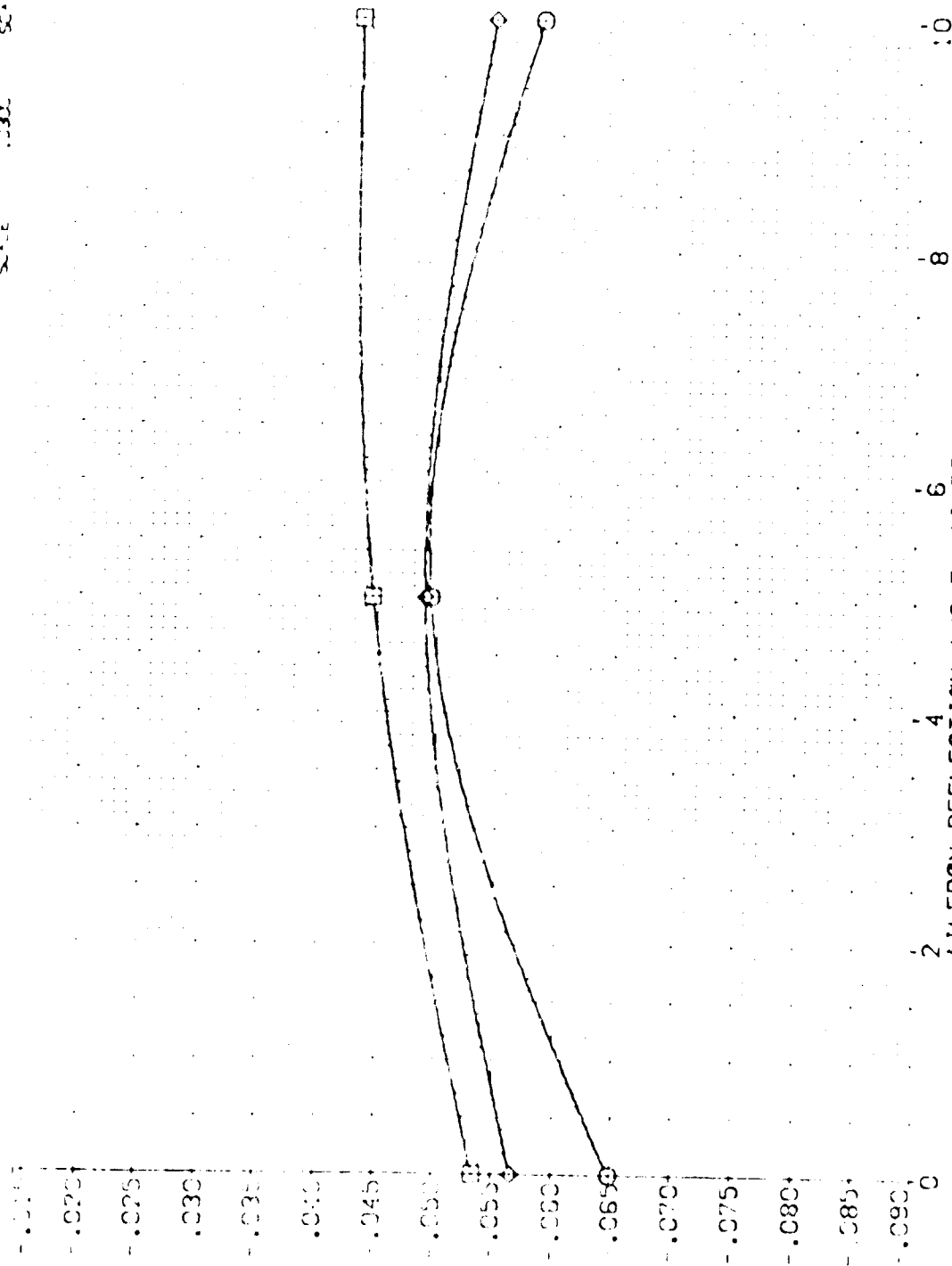


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL  
□ □ ◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEV-L  
ELEV-R

PARAMETRIC VALUES  
.600 BETA  
-10.000 5-FLAP  
25.000 4-UDER  
-10.000 ELEV-R

.000 DATASET  
-11.700 EEJ002  
.000 EEJ021  
-10.000

DATA SOURCE  
AILRON  
.000  
10.000

DATASET  
EEJ005

AILRON  
5.000

SREF  
REF  
BREF  
XMRP  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION  
2.4210 SQ.FT.  
14.2440 IN.  
28.1004 IN.  
32.3010 IN.  
11.2500 IN.  
11.6300 SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

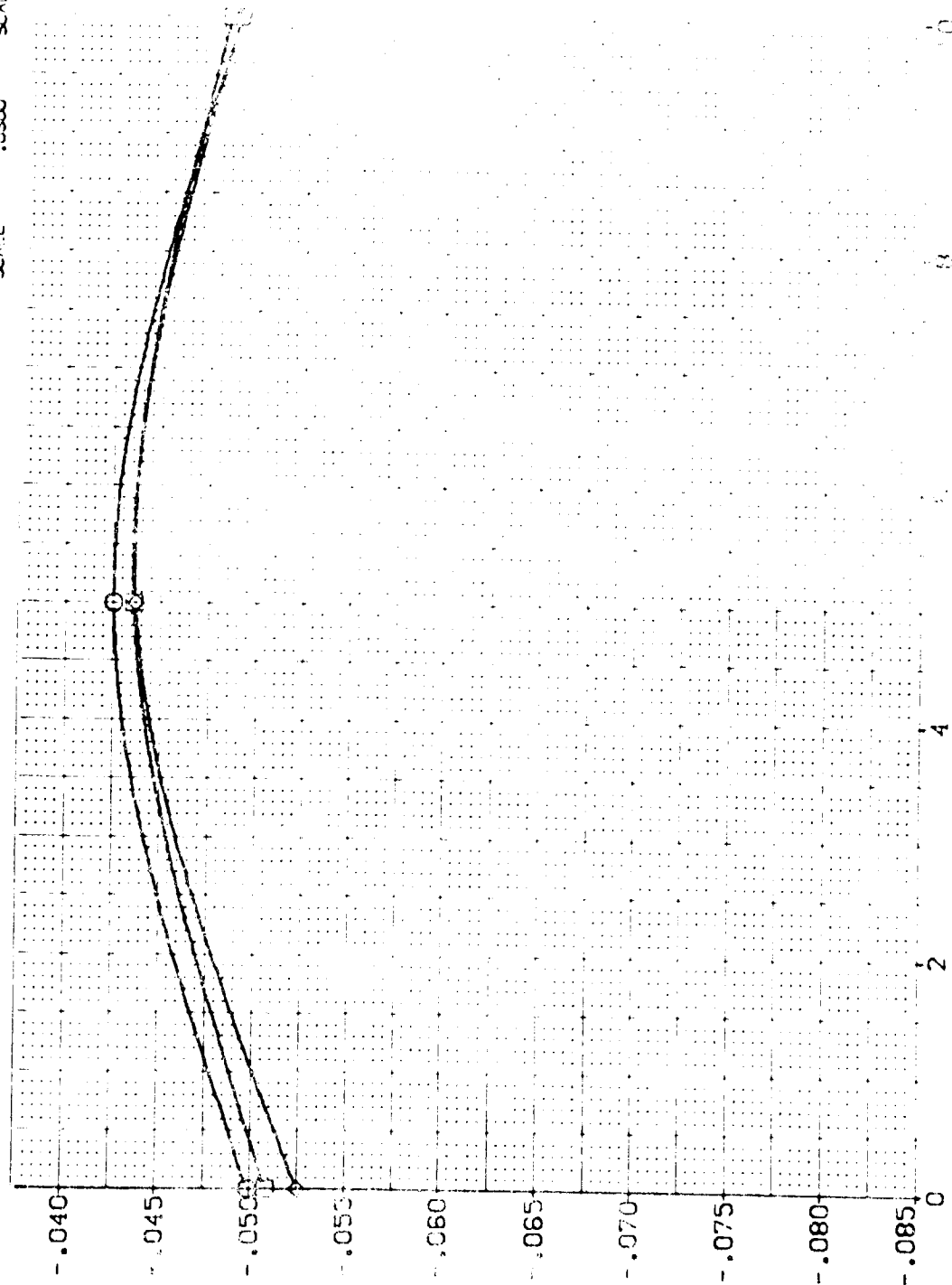


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 GA53A B C M F W1 V NDM. RN/L (EEJ002)

**SYNOPSIS**

ALPHA  
10.000  
20.000

HAD-  
 ELEVEN  
 SPARKS  
 ELEVEN

PARAMETRIC VALUES

PARAMETRIC VALUE  
800 BETA

PARAMETRIC VALUES

PARAMETRIC VALUES

PARAMETRIC VALUES

19,000  
11,700  
1,000  
1,000

DATASET  
EEJOC2  
EEJOC2!

DATASET  
EEJOC2  
EEJOC2!

DATA SOURCE

DATA SOURCE  
AIRLON  
10,000  
10,000

DATA SOURCE  
AIRLON  
10,000  
10,000

DATA SOURCE  
AIRLON  
10,000  
10,000

DATA SOURCE

DATA SOURCE

ROW: S

ROW: S

RES

RES

RES

RES

RES

RES

REFERENCE INFORMATION  
2.421C 50.51.

REFERENCE INFORMATION  
2.4210 50.51.

REFERENCE INFORMATION  
2.421C 50.51.

REFERENCE INFORMATION  
2.421C 50.51.

REFERENCE INFORMATION  
2.421C 50.51.

REFERENCE INFORMATION  
2.4210 50.51.

REFERENCE INFORMATION  
2.421C 50.51.

REFERENCE INFORMATION  
2.4210 50.51.

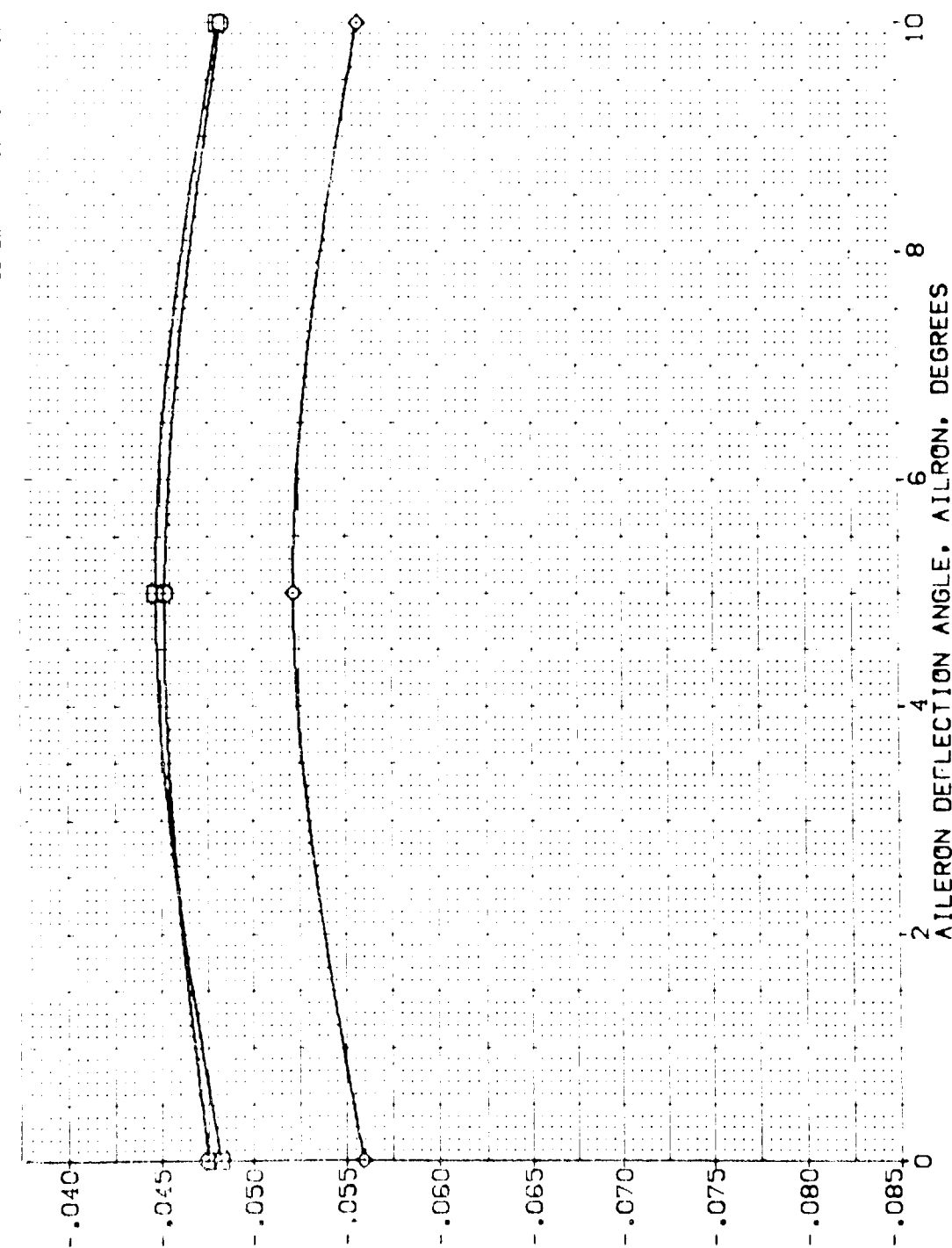


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMOMENT

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARA-METRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	.900	BETA	AILRON	SREF 2.4210 SQ. FT.
◇	10.000	-10.000	BOFLAP	EEJ005	REF 14.2445
	20.000	25.000	RUDDER	10.000	REF 28.1004
		-10.000	ELEV-R	10.000	XREF 32.3010
				10.000	YREF 11.2500
				10.000	SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

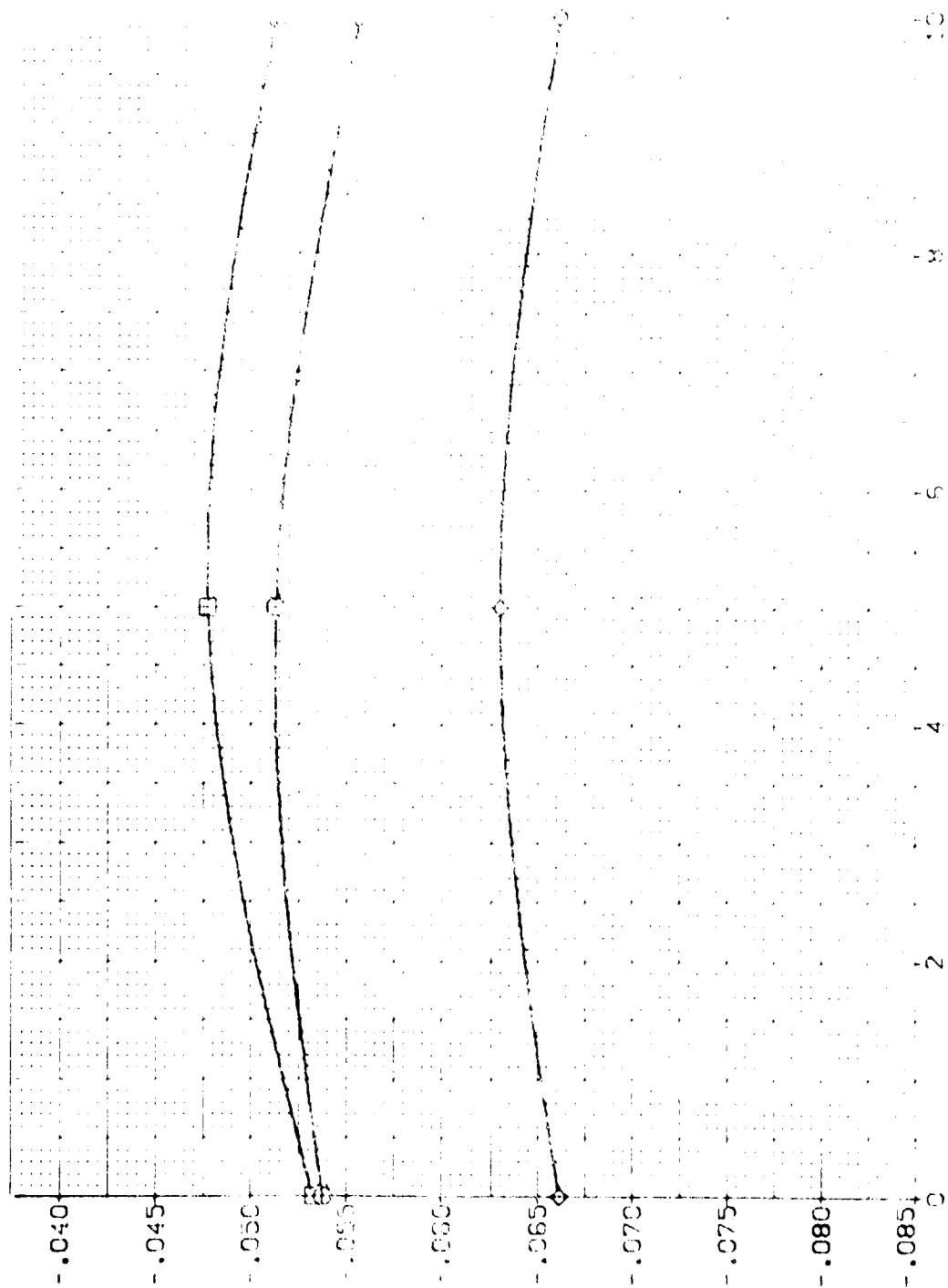


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT



ARC 11-747 0A53A B C M F W1 V NOM. RV/L (EEJ002)

SYMBOL  
 01100  
 01100  
 01100

PARAMETRIC VALUES  
 MACH 1.050  
 BETA 1.050  
 ELEVON -10.000  
 ROLLER -10.000  
 ELEVON -10.000  
 ROLLER -10.000  
 ELEVON -10.000  
 ROLLER -10.000

DATA SOURCE  
 ALLRON  
 ALLRON  
 ALLRON  
 ALLRON  
 ALLRON  
 ALLRON  
 ALLRON  
 ALLRON

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

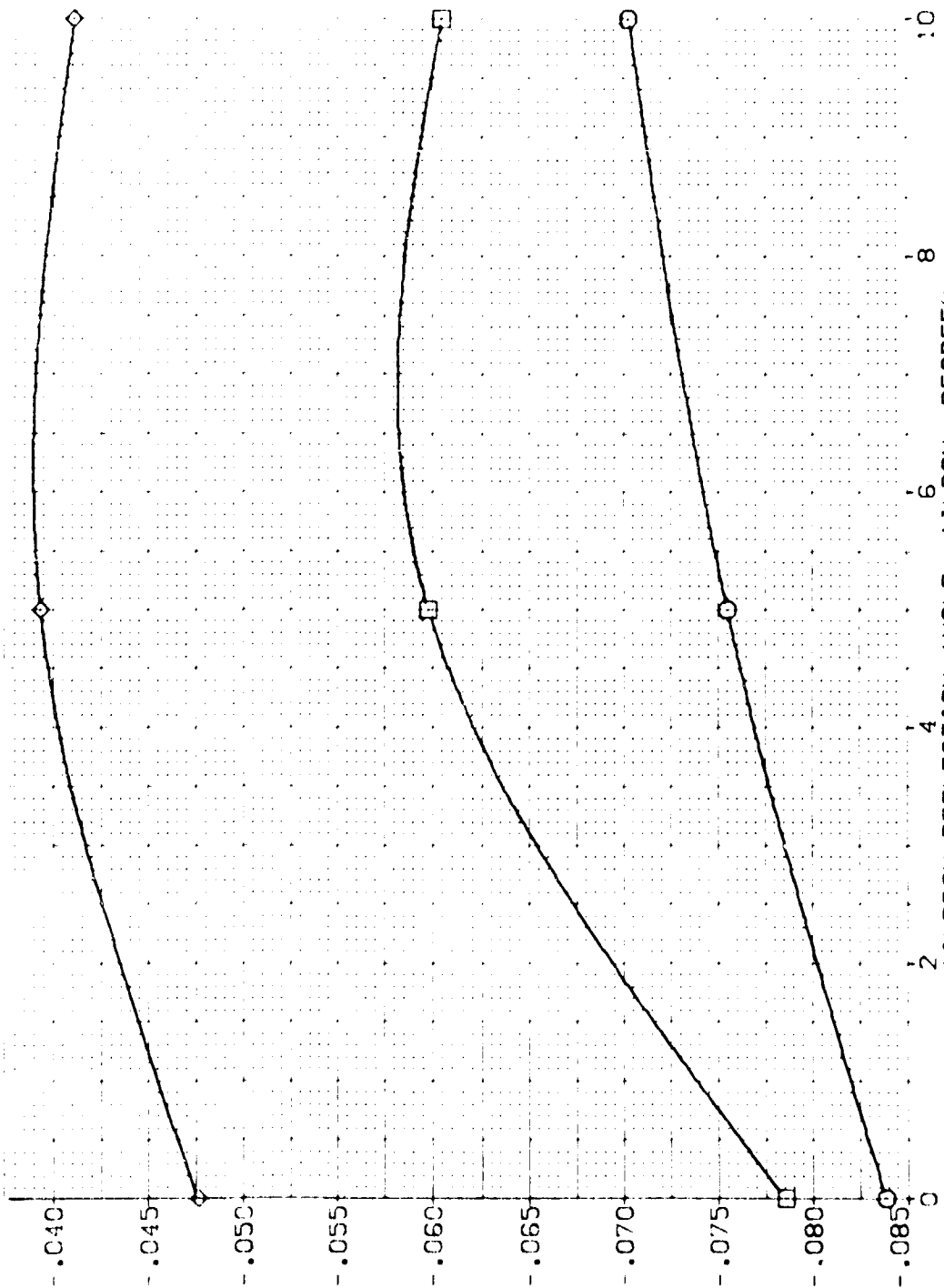


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL  
 ○  
 ◇

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH 1.200  
 ELEVON -10.000  
 SPOILER 25.000  
 ELEV-L -10.000  
 BETA -11.700  
 BDFLAP .000  
 RUDDER .000  
 ELEV-R -10.000

DATA SOURCE  
 AILRON  
 10.000

DATASET  
 EEJ002  
 EEJ002

AILRON  
 5.000

REFERENCE INFORMATION  
 SREF 2.4210  
 LREF 14.2440  
 BREF 28.1004  
 XPRP 32.3010  
 YPRP .0000  
 ZPRP 11.2500  
 SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

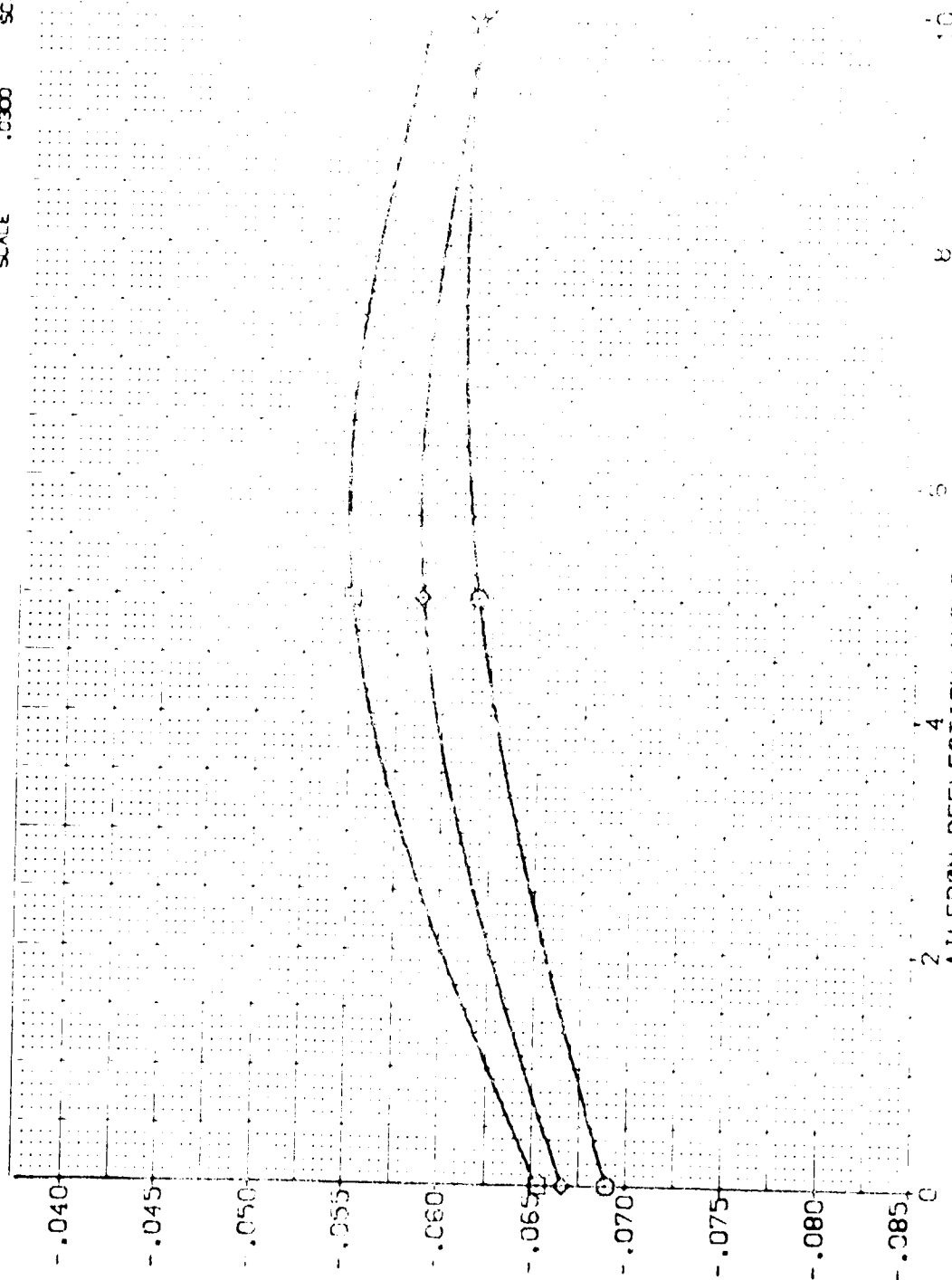


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL  
 ○  
 ◇

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
.000	.600	BETA	AILRON	SREF
10.000	-10.000	80FLAP	EEJ002	LRREF
20.000	25.000	RUDER	EEJ021	BRREF
	-10.000	ELEV-R		YREF
				ZREF
				SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

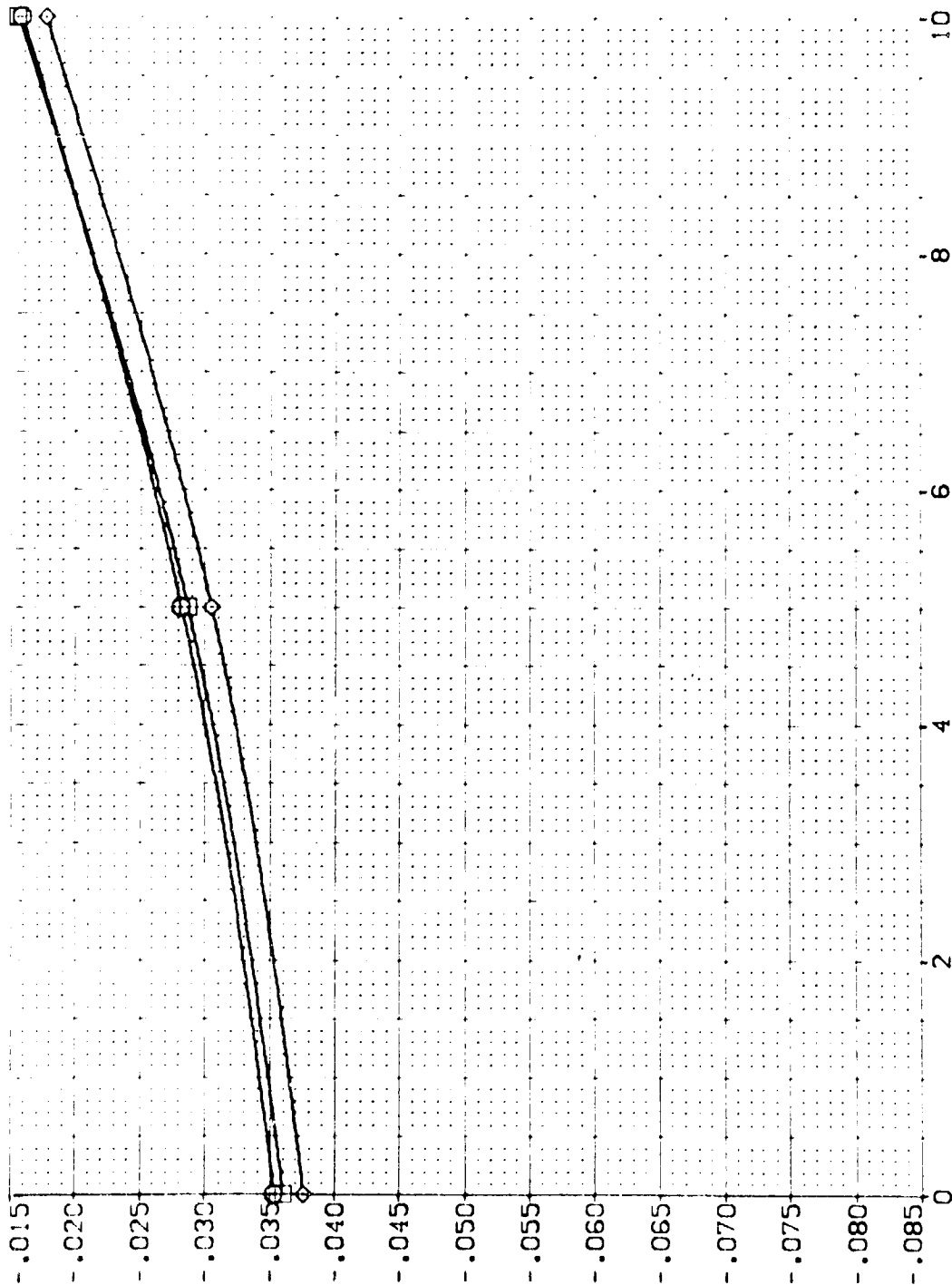


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMOMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	AILRON	SREF	REFERENCE INFORMATION
◇	.000		.800 BETA	AILRON	EEJ005	5.000	2.4210	50.1 FT.
□	10.000	ELEVON	-10.000 BOFLAP	.000 DATASET	EEJ002	.000	14.2440	
□	20.000	SPEEDRK	25.000 RUDDER	-11.700 DATASET	EEJ002	.000	28.1004	
		ELEV-L	-10.000 ELEV-R	.000 DATASET	EEJ002	.000	32.3010	
						.000	11.2500	
						.0300		SCALE

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

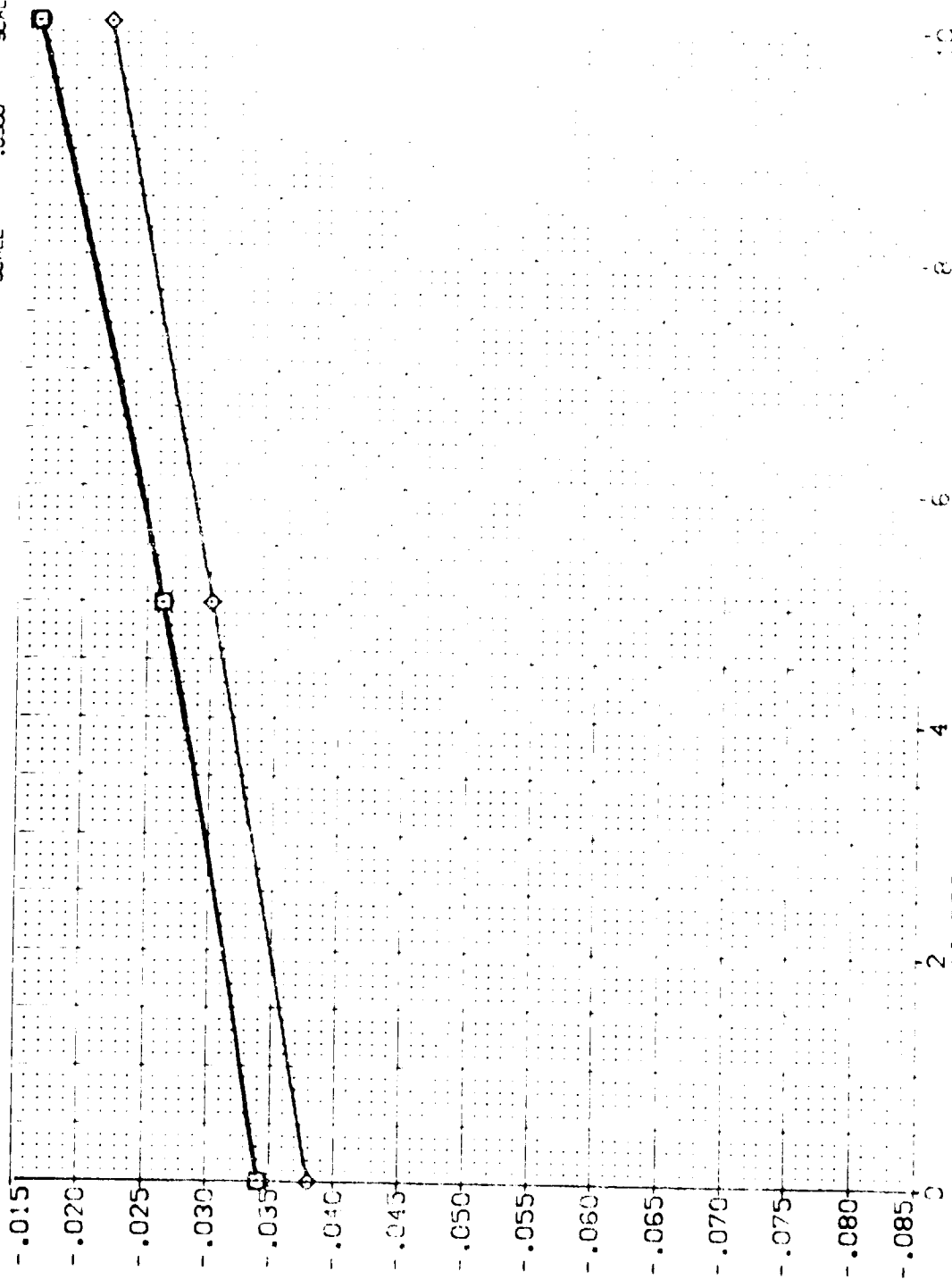


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT



SOURCE	SYMBOL	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
ALPHA	○	BETA	ALIRON	SREF
.000		1.050	.000	2.4240
10.000	□	-10.000	EEJ002	UREF
20.000	◇	BDFAP	.000	14.7410
		-10.000	EEJ005	SREF
		25.000	10.000	28.1004
		-10.000		32.3010
		ELEV-R		YREF
			-10.000	.0000
				ZREF
				11.2500
				SCALE
				10300

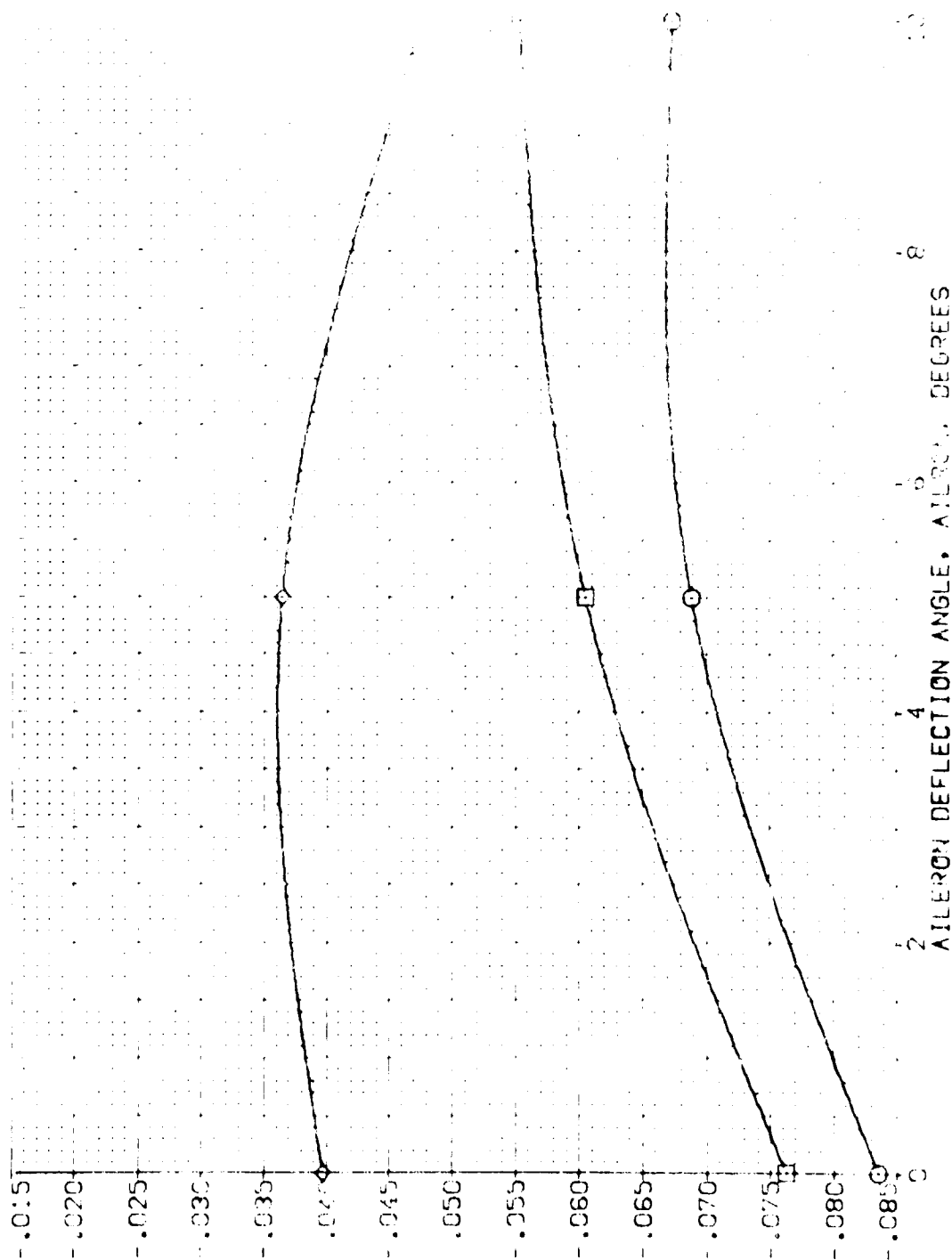


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGE MOMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL

ALPHA

MACH  
ELEVATION  
SPOBRN  
ELEVATION

PARAMETRIC VALUES

1.200 BETA  
-10.000 30° FLAP  
25.000 RUDDER  
-10.000 ELEV-R

DATA SOURCE

.000 DATASET AILRON  
-11.700 EEJ002 .000  
.000 EEJ002 10.000

DATA SOURCE

5.000 DATASET AILRON  
EEJ005

REF

2.4210 SQ.FT.  
14.2440  
28.1000  
32.3010  
11.7500  
1.0300

REFERENCE INFORMATION

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

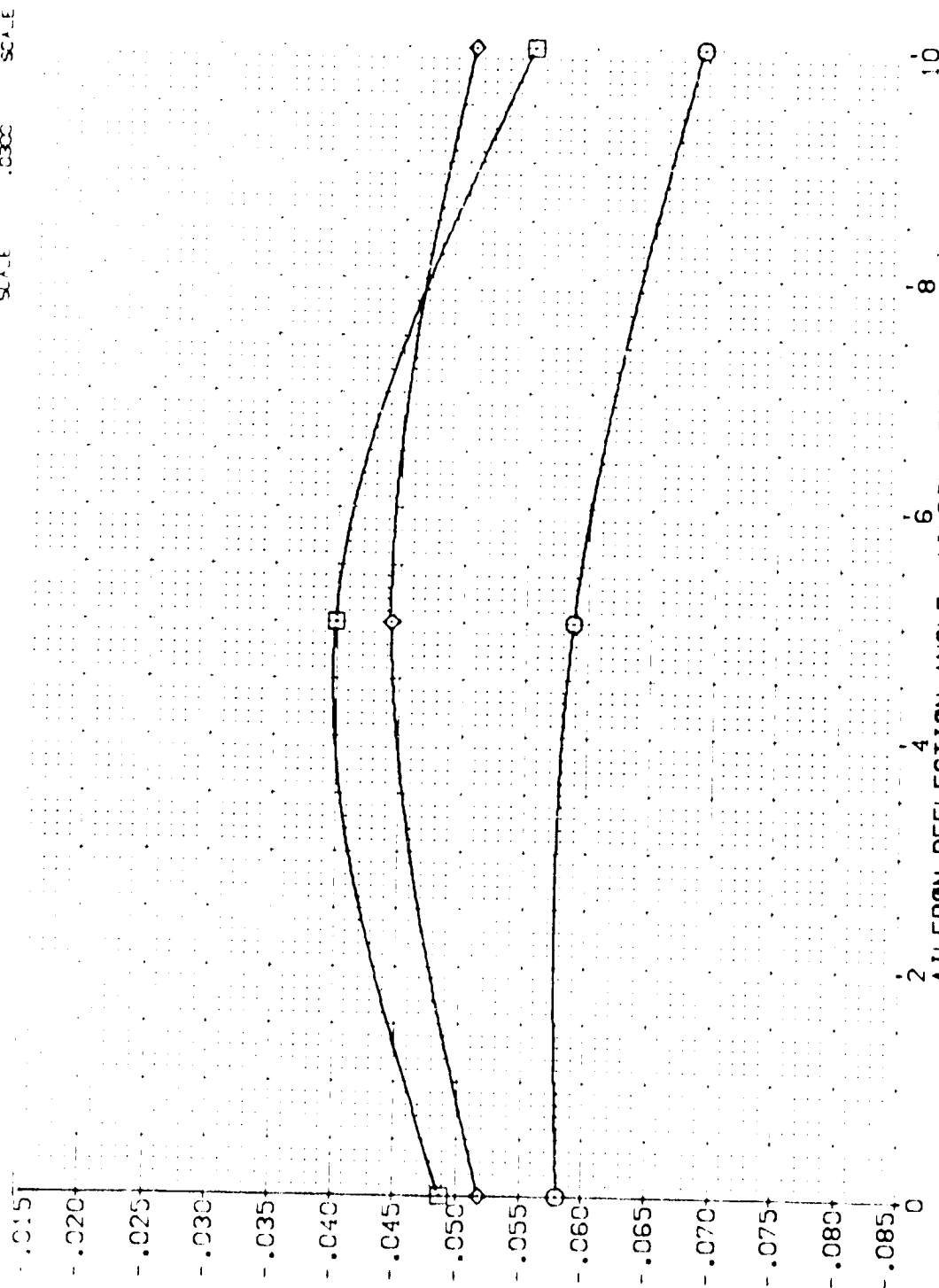


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 1.-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
	ALPHA	MACH	BETA	BOFLAP	EEJ002	AILRON	SREF	LREF	SCALE	SCALE
◇	.000	.600	-10.000	-11.700	.000	10.000	14.2440	28.1004	.0000	.0000
◇	10.000	.600	-10.000	-11.700	.000	10.000	14.2440	28.1004	.0000	.0000
◇	20.000	.600	-10.000	-11.700	.000	10.000	14.2440	28.1004	.0000	.0000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

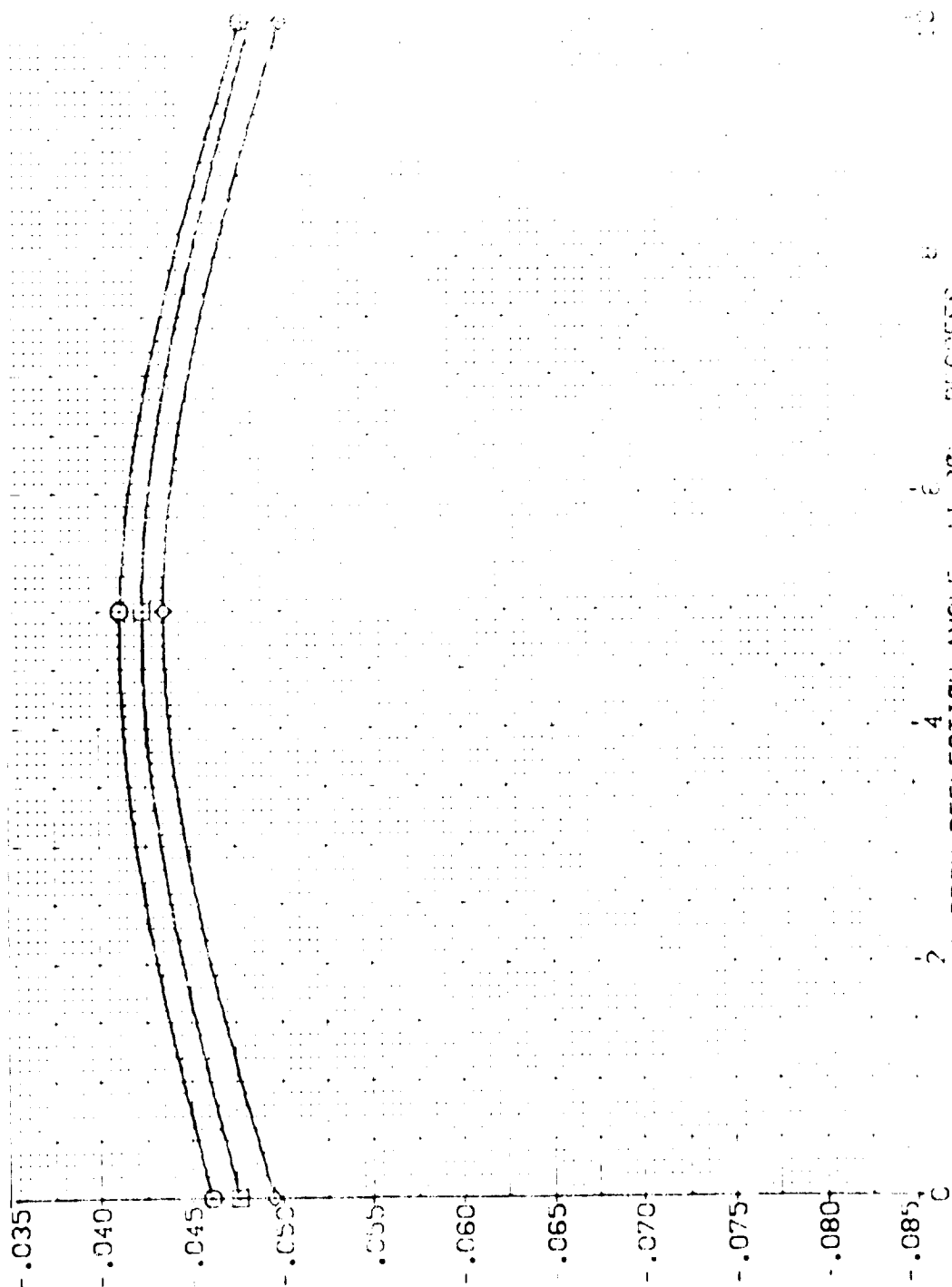


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT



ARC 1:-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL  
 O  
 □  
 △  
 ◇

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .800  
 BETA -10.000  
 90FLAP -10.000  
 25.000  
 RUDDER -10.000  
 ELEV-R -10.000

DATA SOURCE  
 AILRON  
 DATASET EEJ005  
 AILRON  
 DATASET EEJ002  
 EEJ002  
 EEJ002

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.1440 IN.  
 BREF 28.1000 IN.  
 Y400 32.1010 IN.  
 Y400 32.1000 IN.  
 Y400 32.1000 IN.  
 Y400 32.1000 IN.  
 SCALE 11.3000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

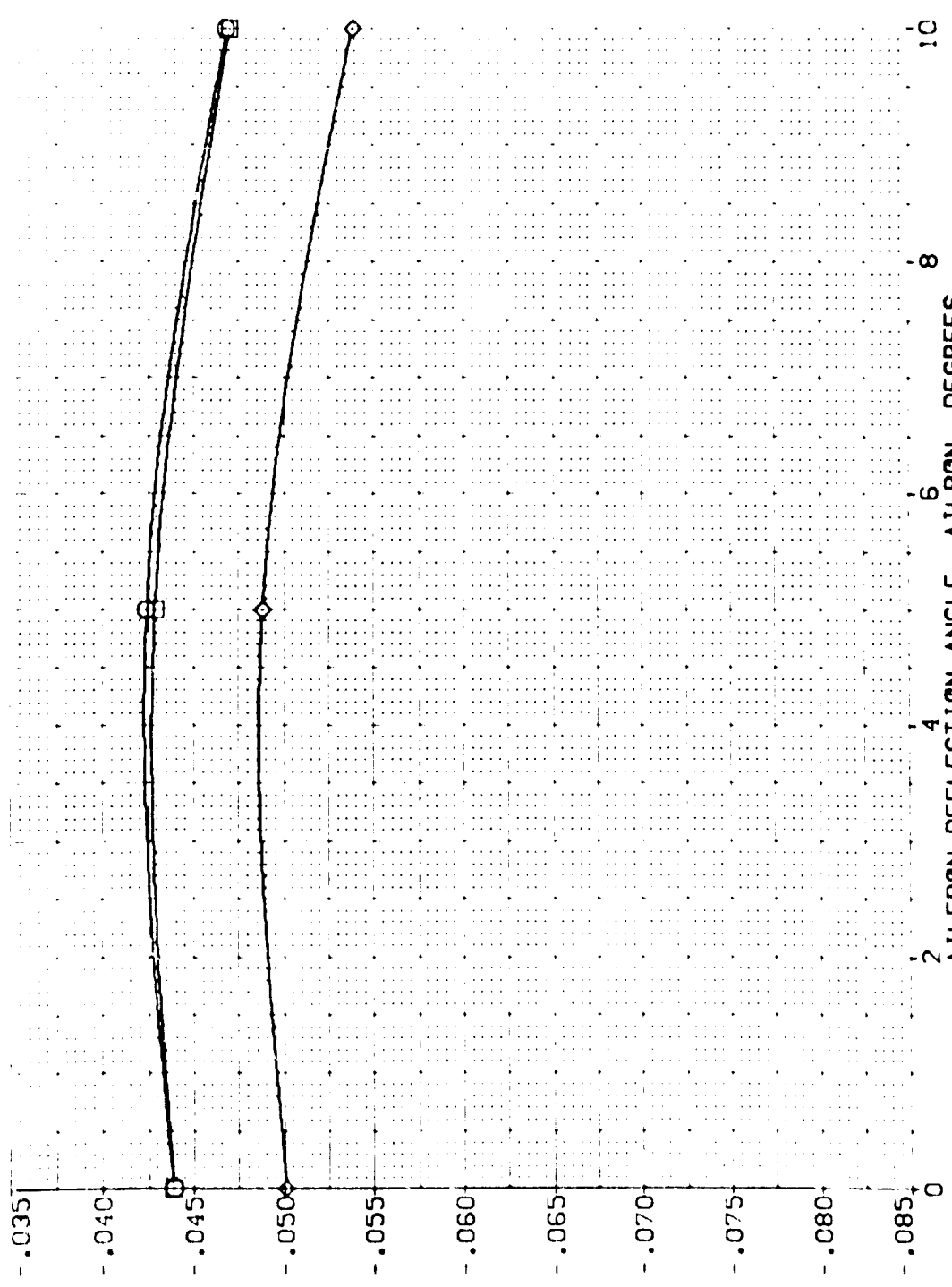


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATA SET	AILRON	SPEED	REFERENCE INFORMATION
◇	.000	.900	BETA	.000	EEJ002	5.000	2.4210	50. FT.
○	10.000	-10.000	BOFLAP	-11.700	EEJ002	.000	14.2440	10.000
◇	20.000	25.000	RUDER	.000	EEJ002	10.000	28.1100	10.000
		-10.000	ELEV-R	-10.000			32.3010	10.000
			ELEV-L				.0000	10.000
							11.2500	10.000
							SCALE	SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

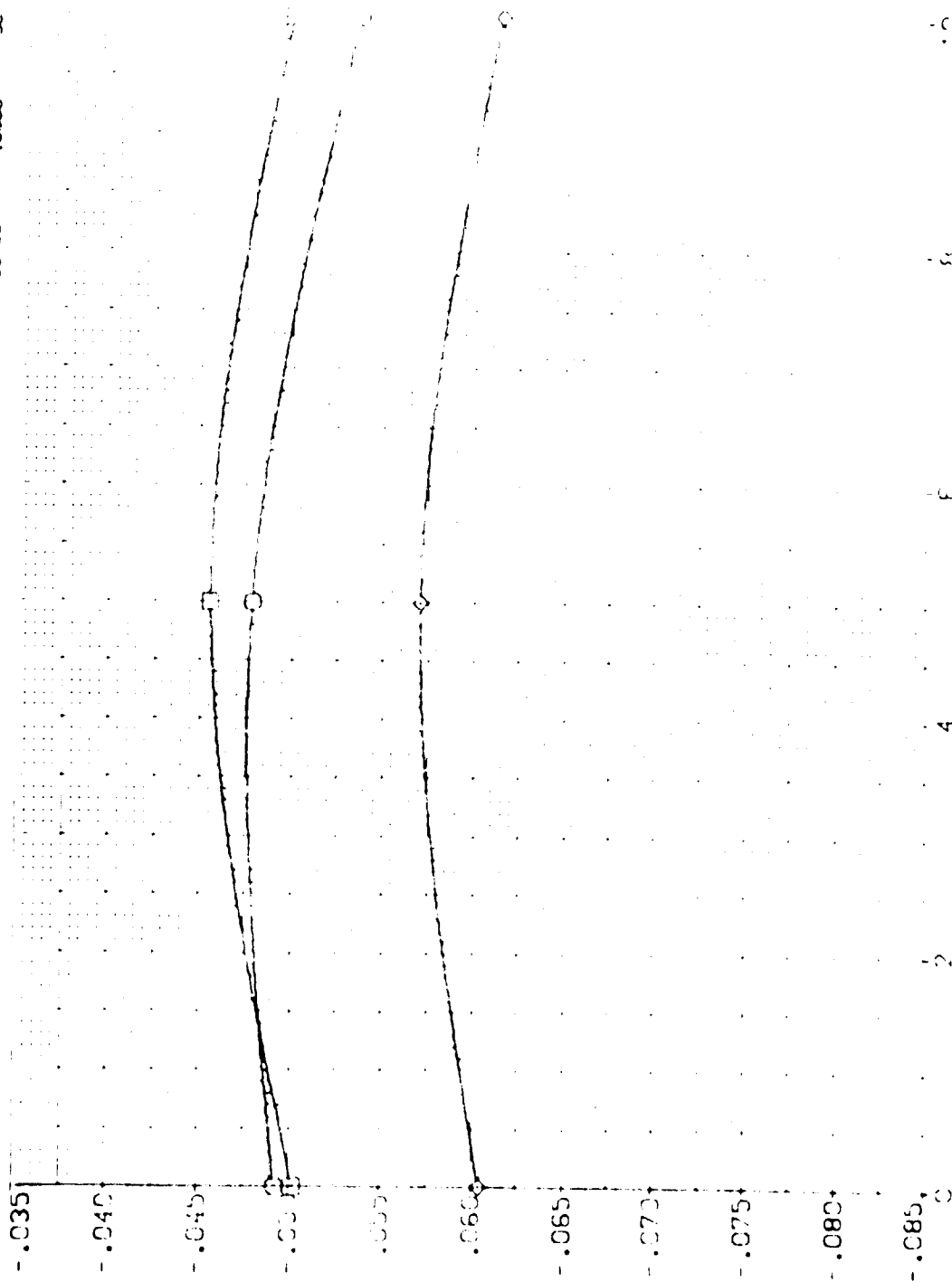


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGE MOMENT

ARC 11-747 0A53A 3 C M F W1 V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	1.050	BETA	ALIRON	2.4210 SQ.FT.
○	10.000	-10.000	BOXLAP	EEJ002	14.1140
○	20.000	25.000	RUDDER	EEJ005	28.1000
		-10.000	E F V-R	EEJ005	32.3010
				SCALE	11.2500
					10.300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

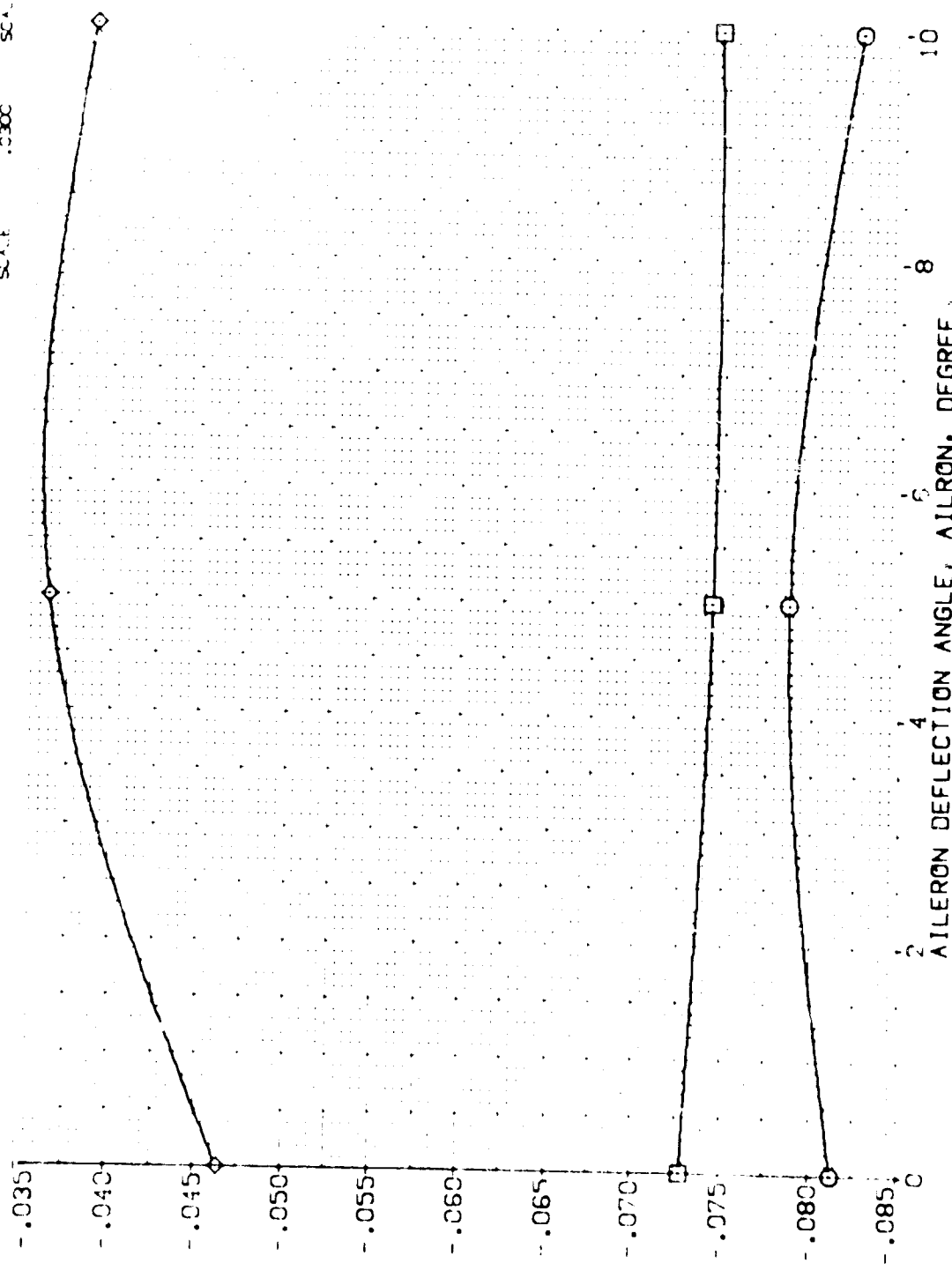


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ002)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	AILRON	SREF	REFERENCE INFORMATION
◇	.000		BETA	AILRON	EEJ005	5.000	2.4210	SO.FT.
○	.000		BOFLAP	.000			14.2440	IN.
○	.000		RUDDER	10.000			28.1000	IN.
○	.000		ELEV-R				32.3010	IN.
○	.000		ELEV-L				.0000	IN.
							11.2500	SCALE
							.0300	

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

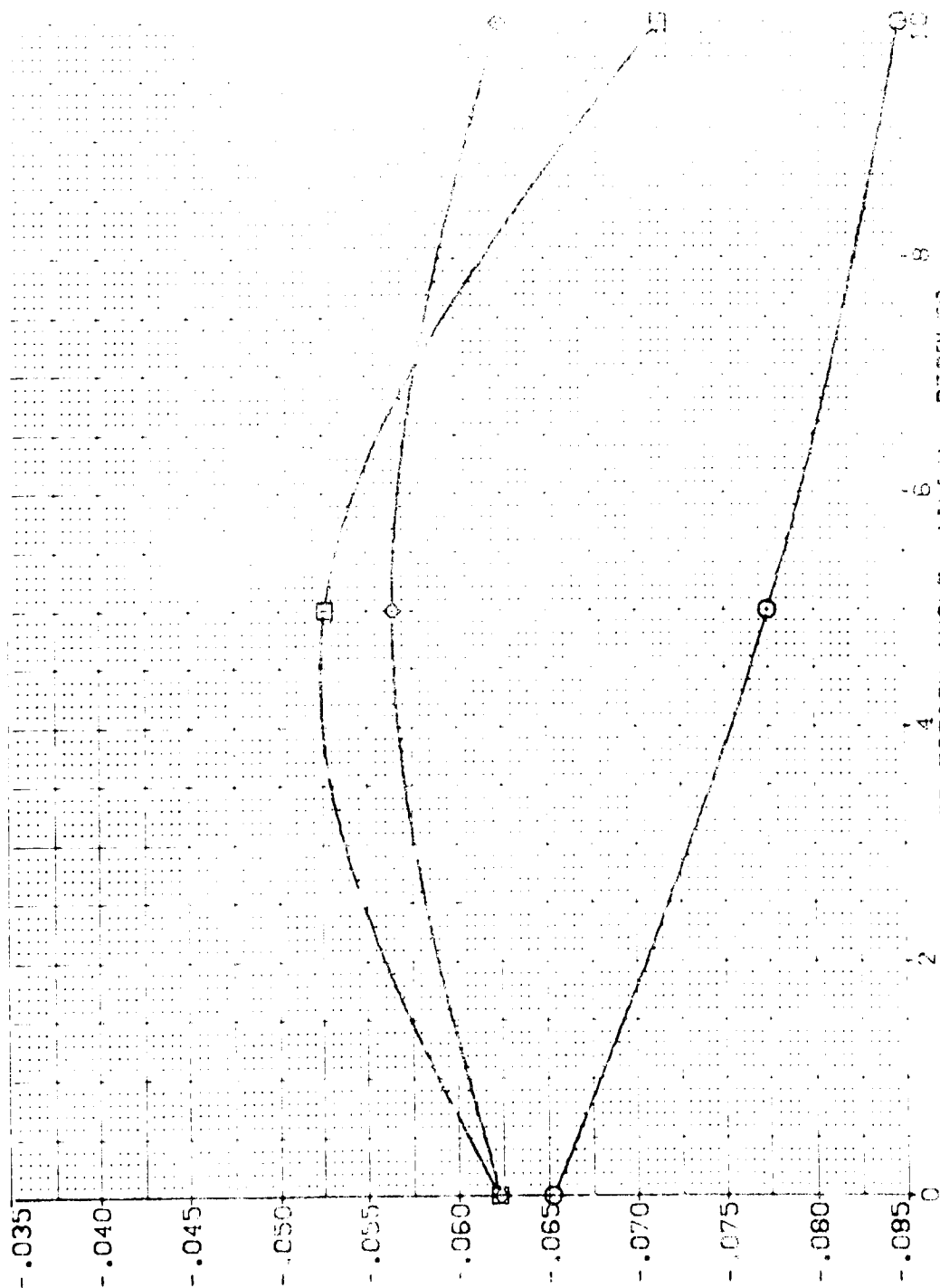


FIG. 42 EFFECT OF AILERON DEFLECTION ON RUDDER HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL

◇ ○ □

ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH .500  
ELEV-R -10.000  
SPDRK 75.000  
ELEV-R -10.000

BETA  
-10.000  
RUDER  
-10.000

DATA SOURCE  
AILRON  
DATASET  
EEJ002  
EEJ002  
EEJ002

AILRON  
5.000  
DATASET  
EEJ005

SCALE  
2.4210  
14.7440  
28.1000  
32.3010  
11.7500  
SCALE  
11.7500  
SCALE  
11.7500

BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

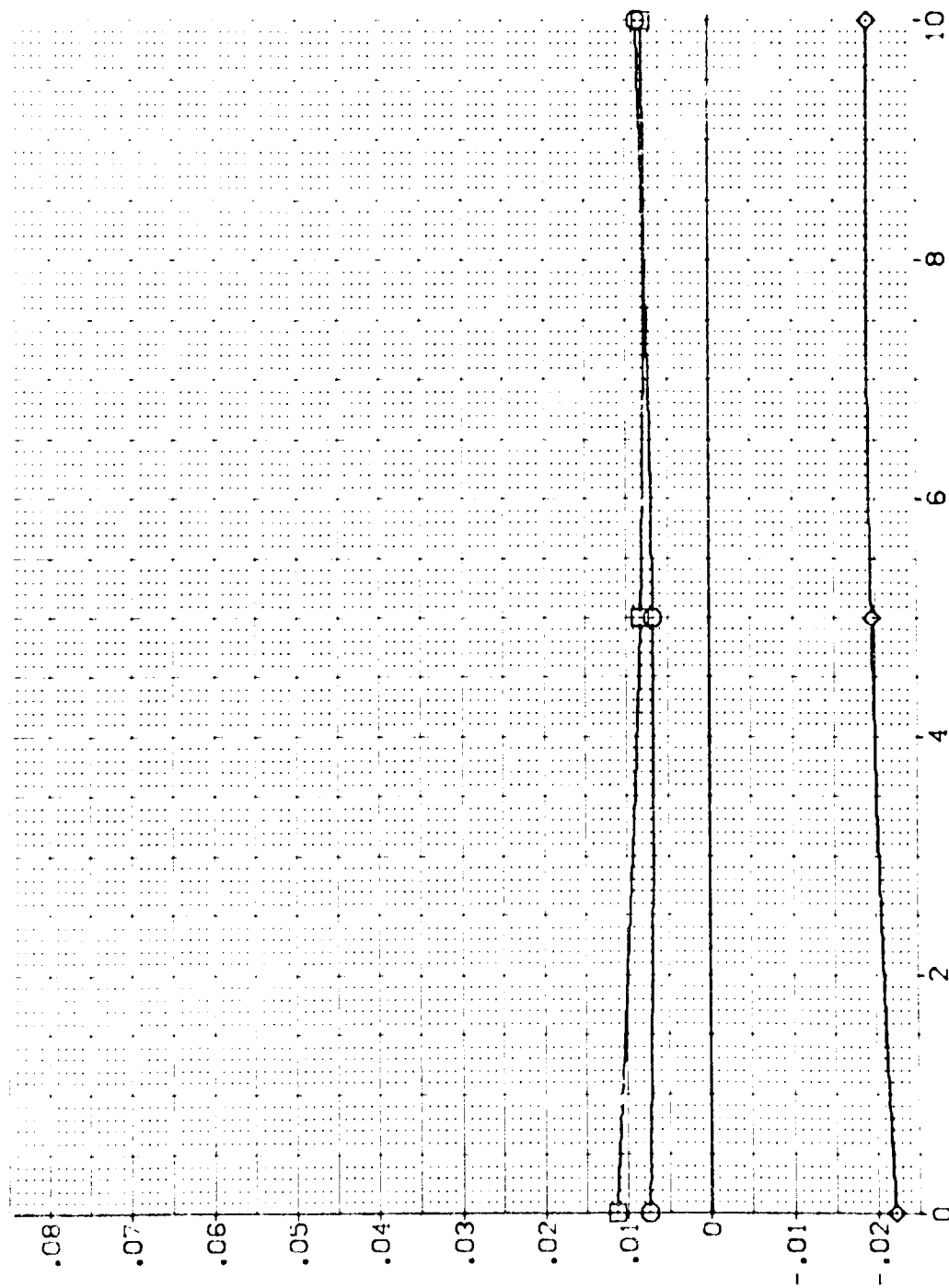


FIG. 43 EFFECT OF AILERON DEFLECTION ON BODYFLAP HINGEMOMENT

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ002)

SYMBOL

◇ □ ○

PARAMETRIC VALUES

MACH .800  
ELEVON -10.000  
SPDRK 25.000  
ELLV-L -10.000

BETA

BOFLAP -10.000  
RUDDER .000  
ELEV-R -10.000

DATA SOURCE

AILRON .000  
AILRON 10.000

DATASET

.000 EEJ002  
-11.700 EEJ002  
.000 EEJ021  
-10.000

DATASET

AILRON 5.000  
EEJ005

SRF

LRFF  
BRFF  
YMRP  
ZMRP  
SCALE

REFERENCE INFORMATION

2.4210 SQ.FT.  
14.2440 IN.  
28.1004 IN.  
32.5010 IN.  
11.2500 IN.  
.0300 SCALE

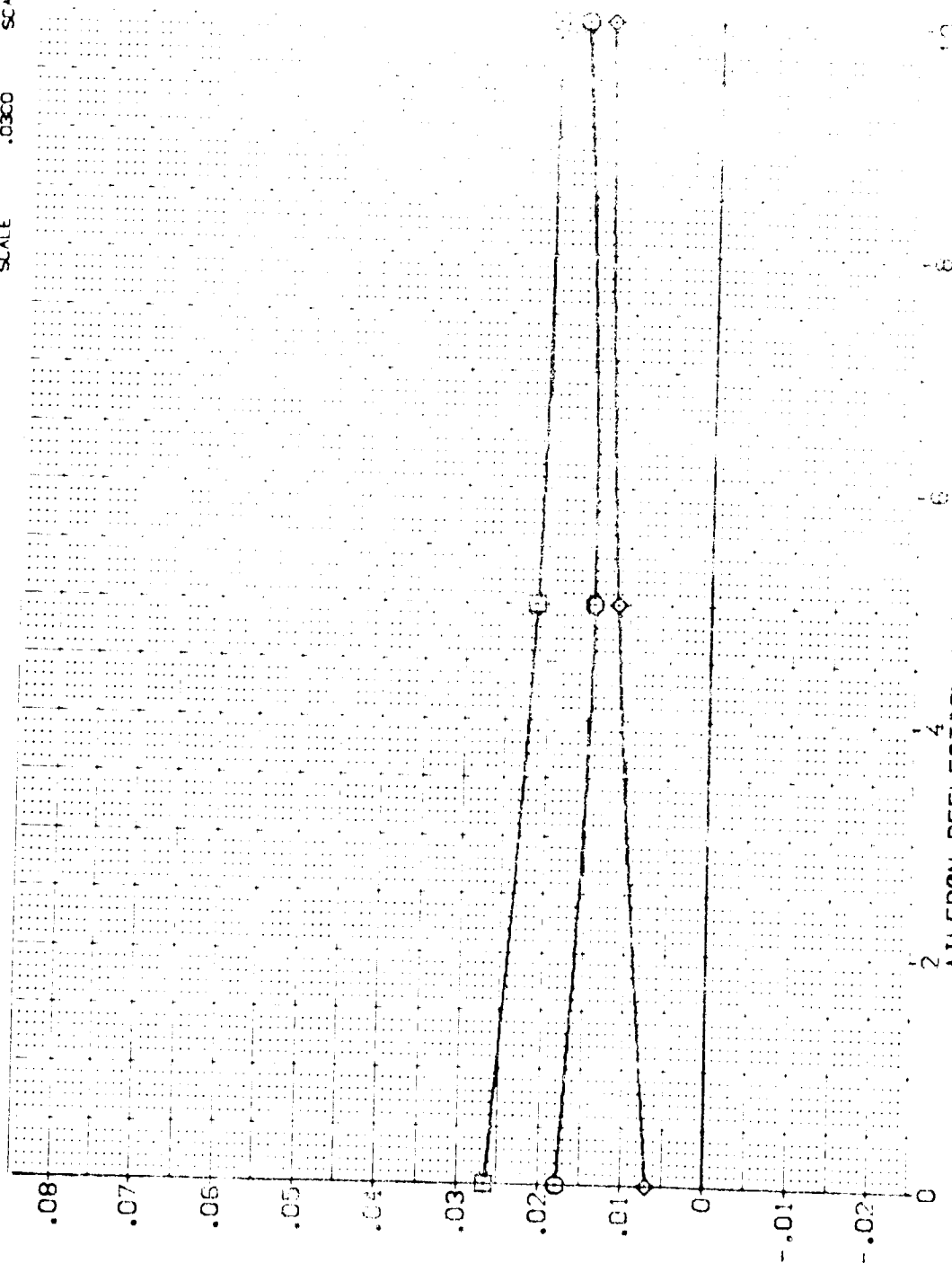


FIG. 43 EFFECT OF AILERON DEFLECTION ON BODYFLAP HINGEMENT

ARC 11747 0A53A B C M F W1 V NOM. RIV/L (EEJ002)

SYMBOL

○

◇

ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH .900  
FLYON -10.000  
SPUBW 25.000  
ELEV-L -10.000  
BETA  
BDFLAP  
RUDDER  
ELEV-R

DATA SOURCE  
AIIRON  
.000  
10.000

DATASET  
EEJ002  
EEJ021  
.000  
-10.000

AIIRON  
5.000  
SREF  
XREF  
YREF  
ZREF  
SCALE

REFERENCE INFORMATION  
2.421C  
14.144C  
28.100C  
32.301C  
11.250C  
10.000  
SCALE

BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

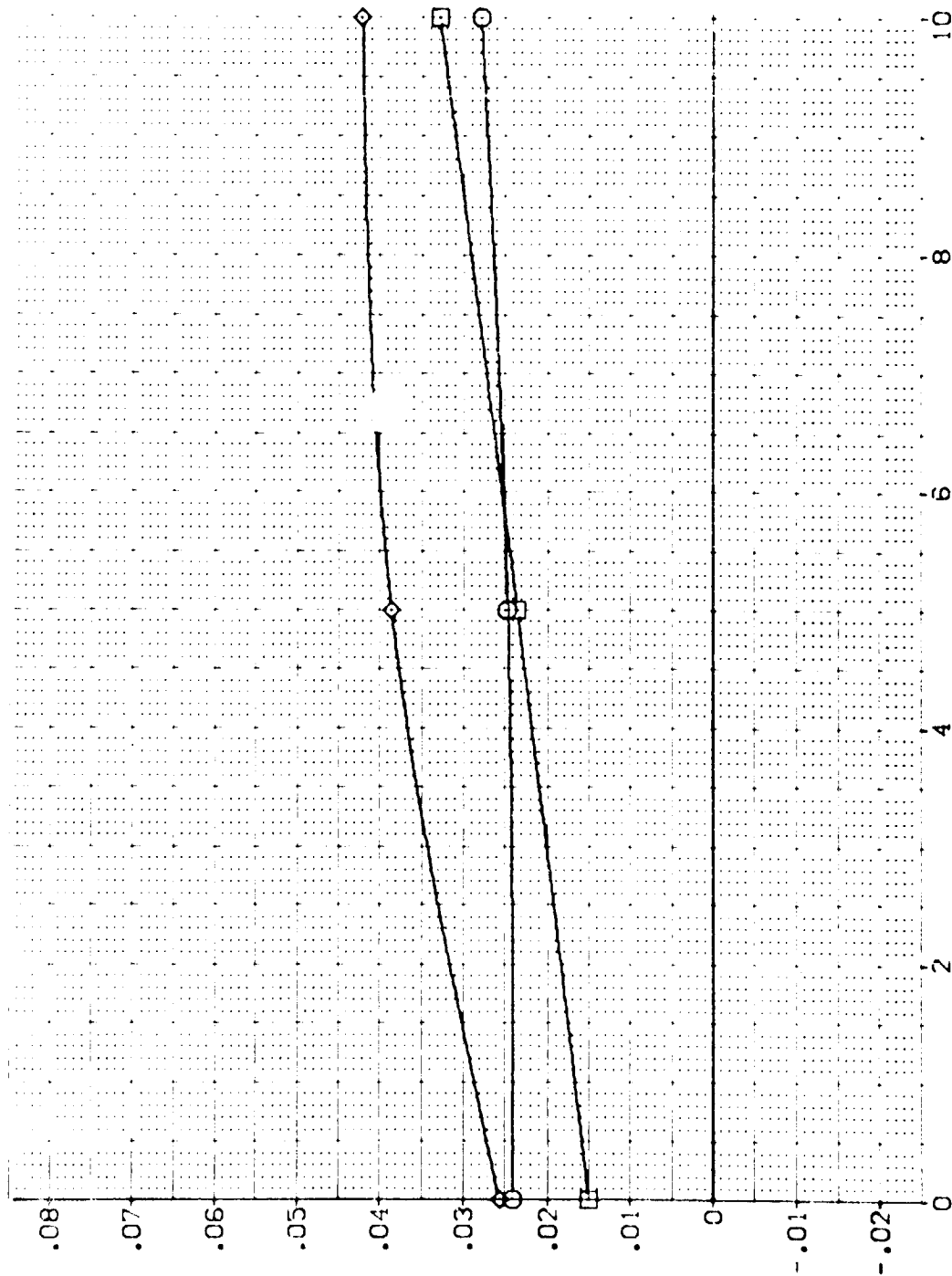


FIG. 43 EFFECT OF AILERON DEFLECTION ON BODYFLAP HINGEMENT

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ002)

SYMBOL

ALPHA

MACH

PARAMETRIC VALUES

DATA SOURCE

REFERENCE INFORMATION

○

□

◇

0.000  
10.000  
20.000

1.050 BETA  
-10.000 BOFLAP  
25.000 RUDDER  
-10.000 ELEV-R

.000 DATASET  
-11.700 EEJ002  
.000 EEJ001  
-10.000

SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP .0000  
ZMRP 11.2500  
SCALE .0300



FIG. 43 EFFECT OF AILERON DEFLECTION ON BODYFLAP HINGE MOMENT



ARC 11-747 0A53A B C M F W1 V NDM. RN/L (EEJ002)

SYMBOL  
 ○ □ ◇

PARAMETRIC VALUES  
 MACH 1.200 BETA .000 DATASET AILRON .000  
 ELEVON -10.000 BDFLAP -11.700 EEJ002 EEJ005  
 SPODBK 25.000 RUDDER .000  
 ELEV-L -10.000 ELEV-R -10.000

DATA SOURCE  
 AILRON .000  
 EEJ005 10.000

REF. INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 DREF 28.1004  
 XMRP 37.3010  
 YMRP .0000  
 ZMRP 11.2500  
 SCALE .0300

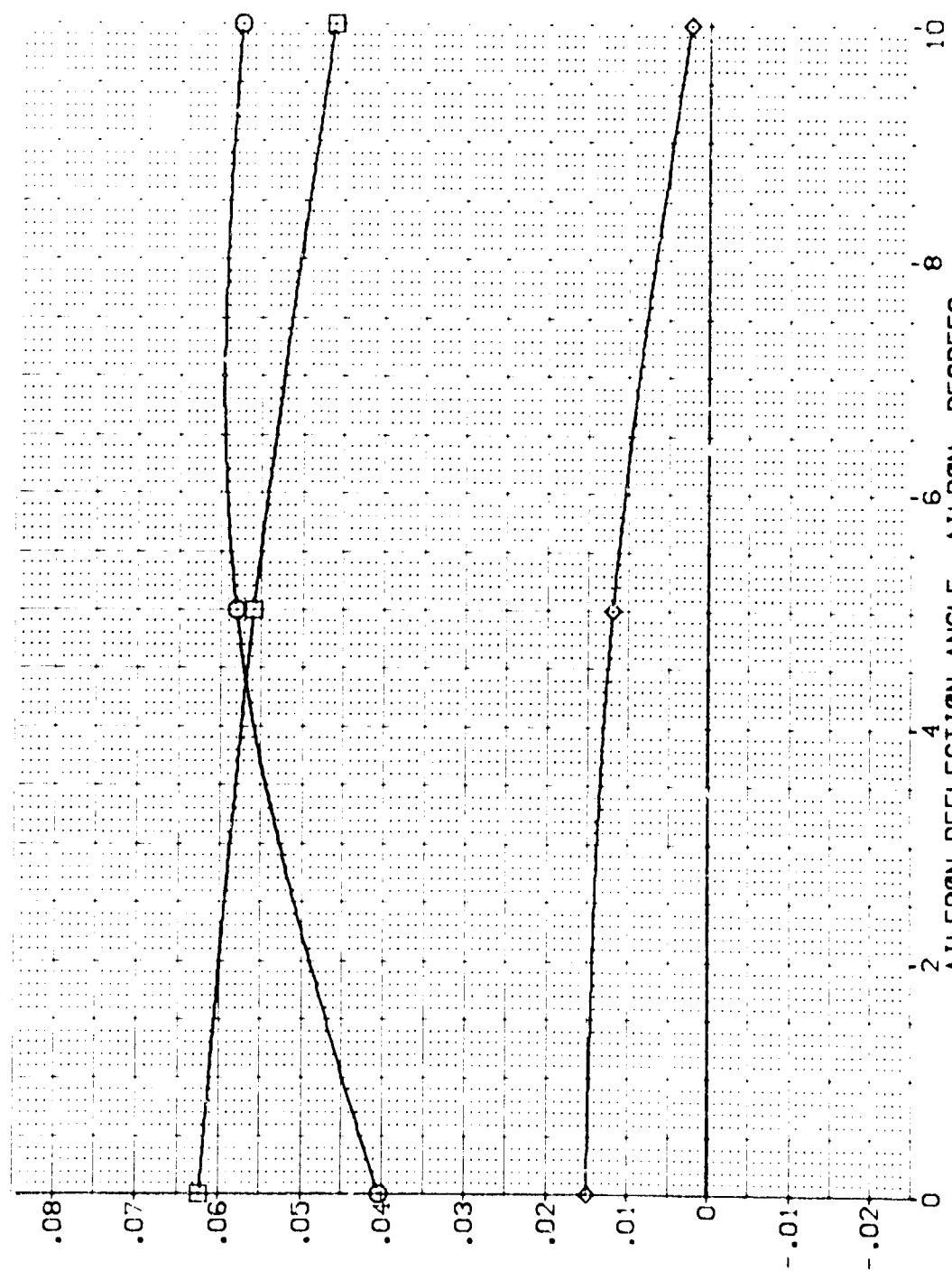


FIG. 43 EFFECT OF AILERON DEFLECTION ON BODYFLAP HINGEMENT

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL		PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
ALPHA		INCH	BETA	.000	DATASET	ELEV-L	EEJ003	SREF	2.4210	SO.FT.	
.000		ELEVON	AILRON	-7.500	EEJ006	.000		LREF	14.2440	IN.	
10.000		BDFLAP	SPOBRK	-11.700	25.000			XMRP	28.1004	IN.	
20.000		RLOOR	ELEV-R	.000	15.000			MRP	32.3010	IN.	
								ZMRP	.0000	IN.	
								SCALE	11.2500	SCALE	
									.0300		

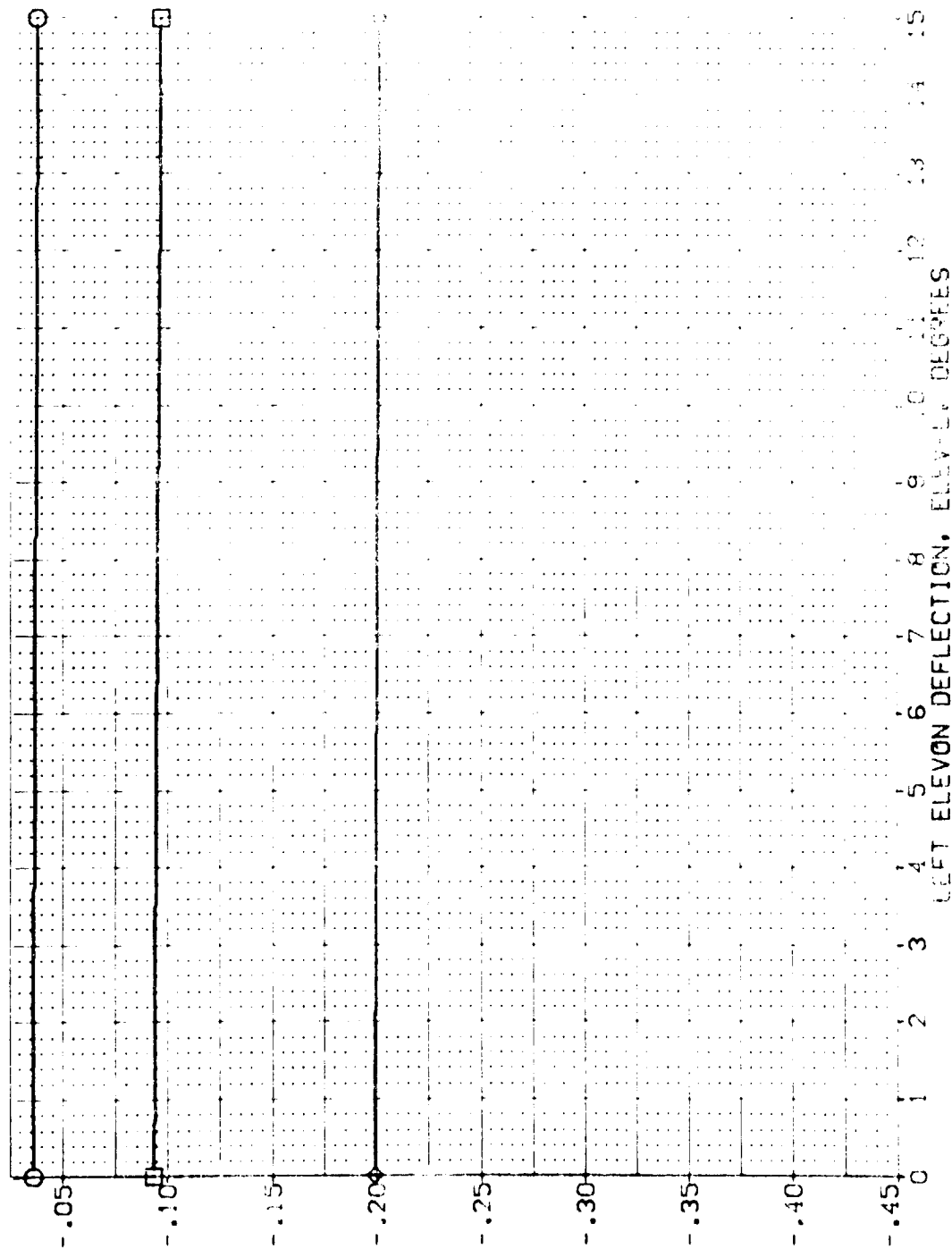


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .800  
 BETA 7.500  
 AILRON -11.700  
 SPOBRK .000  
 ELEV R 15.000

DATA SOURCE  
 DATASET EEJ006  
 ELEV-L .000

REFERENCE INFORMATION  
 SREF 2.421C  
 LREF 14.244C  
 BREF 28.1004  
 XMRP 32.901C  
 YMRP .000C  
 ZMRP 11.250C  
 SCALE .030C

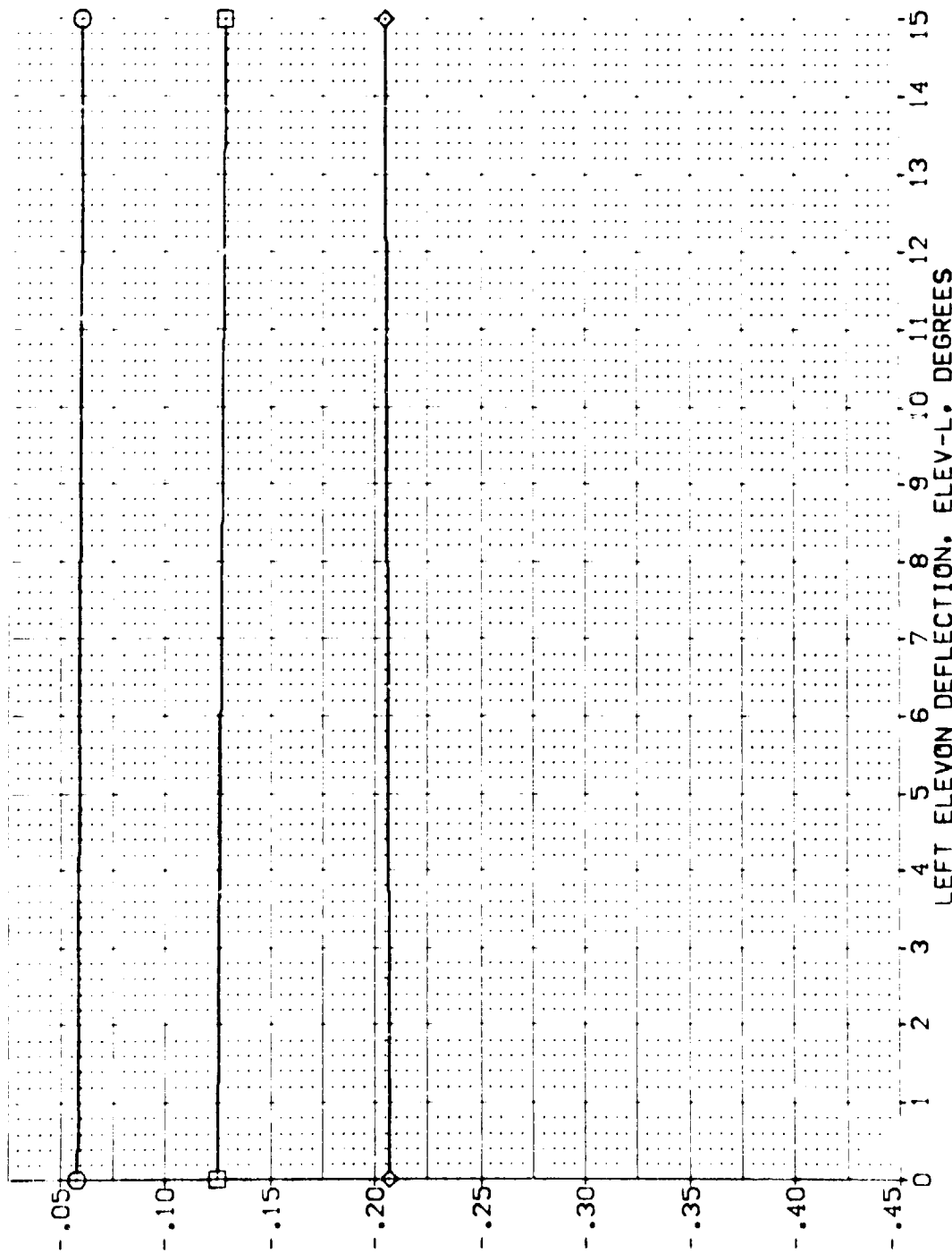


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
□	.000	ELEVON	BETA	ELEV-L	SREF
□	10.000	BOFLAP	AILRON	EEJ006	LREF
◇	20.000	RUDDER	SPDRK	25.000	BREF
			ELEV-R	15.000	XMRP
					YMRP
					ZMRP
					SCALE
					2.4210
					14.2440
					28.1004
					32.3010
					.0000
					11.2500
					.0300

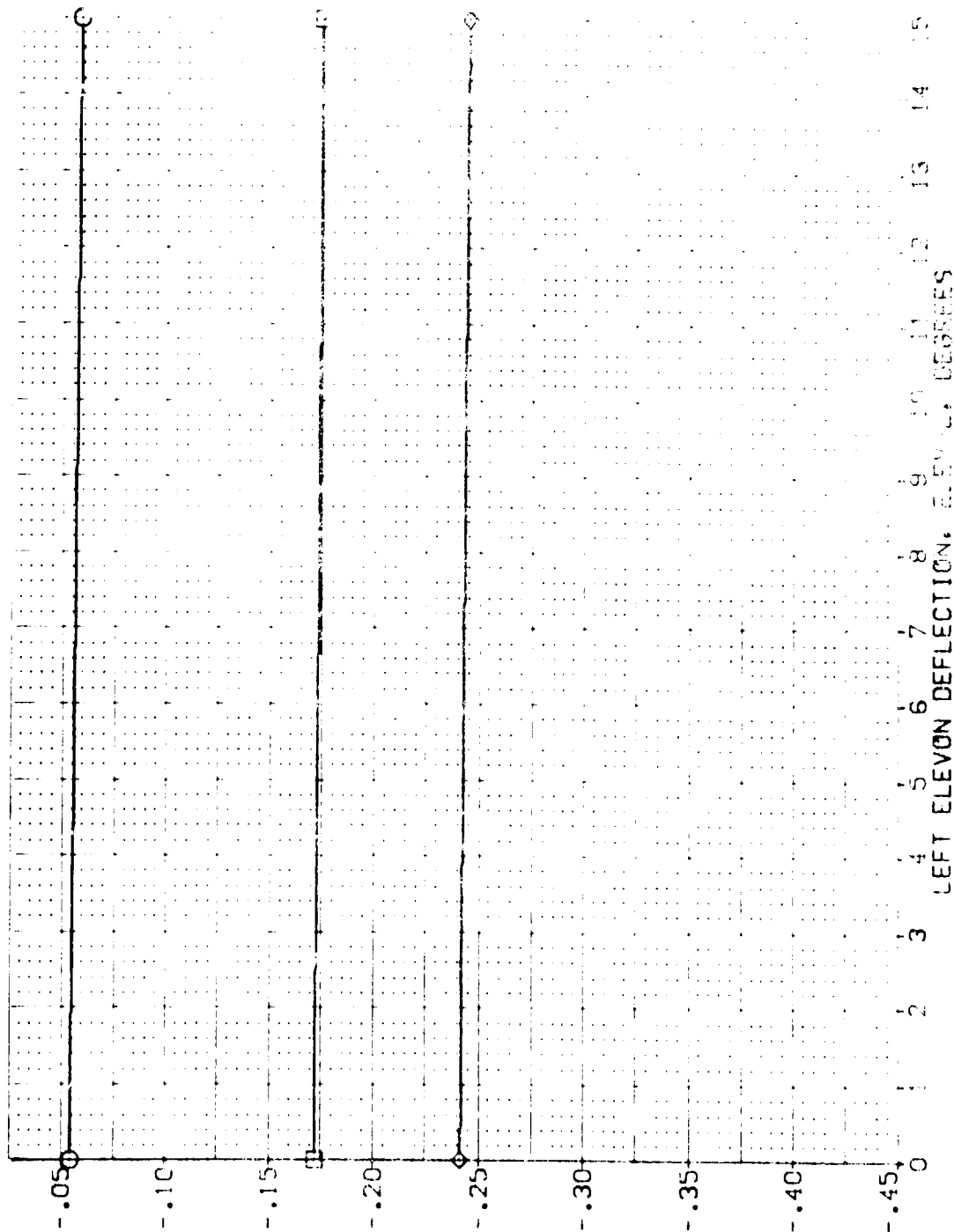


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0453A B C M F W1 V RN/L = 3.0 (EEJ006)

ALPHA	WACH	PARAMETRIC VALUES	DATA SOURCE	DATASET	ELEV-L	SREF	REFERENCE INFORMATION
.000	1.050	BETA	.000	EEJ006	.000	2.4210	SO.17.
10.000	7.500	AILRON	-7.500	EEJ006	15.000	14.2440	14.2440
20.000	-11.700	SPOGRK	25.000			28.1004	28.1004
		ELEV-R	15.000			32.3010	32.3010
						11.2500	11.2500
						.0300	.0300
						SCALE	SCALE

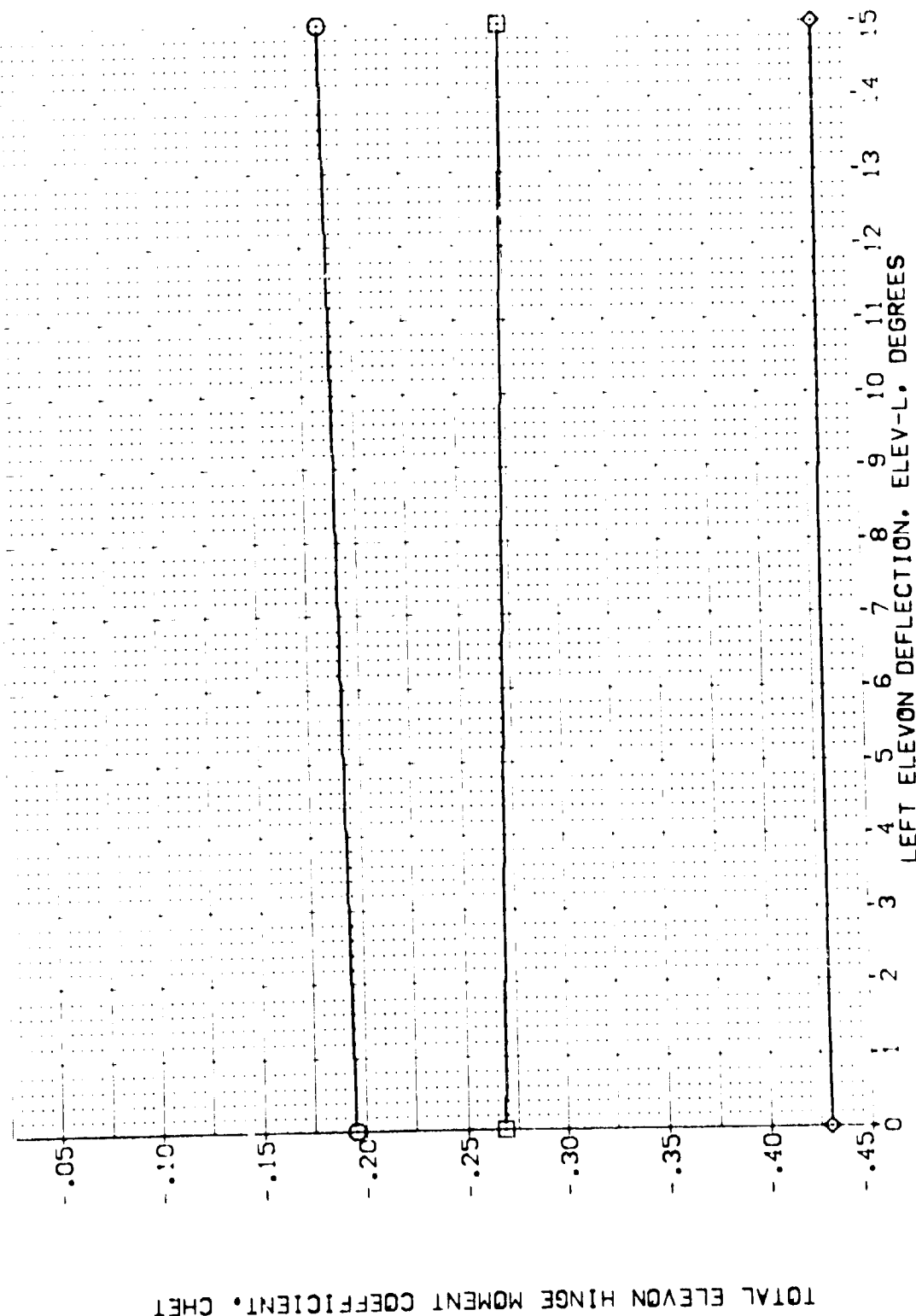


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES



ARC 11-47 0A53A B C M F W1 V RH/L = 3.0 (EEJ006)

SYMBOL  
○  
□  
◇

PARAMETRIC VALUES  
ALPHA .000  
BETA .600  
ATLPOH 7.50°  
SPDRK 11.700  
ELEV-R .000  
ELEV-L 15.000

DATA SOURCE  
ELEV-L .000  
ELEV-R 15.000

REFERENCE INFORMATION  
SREF 2.4210  
XREF 14.2440  
YREF 28.1004  
XMRP 32.3010  
YMRP .0000  
THRP 11.2500  
SCALE .0300

INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

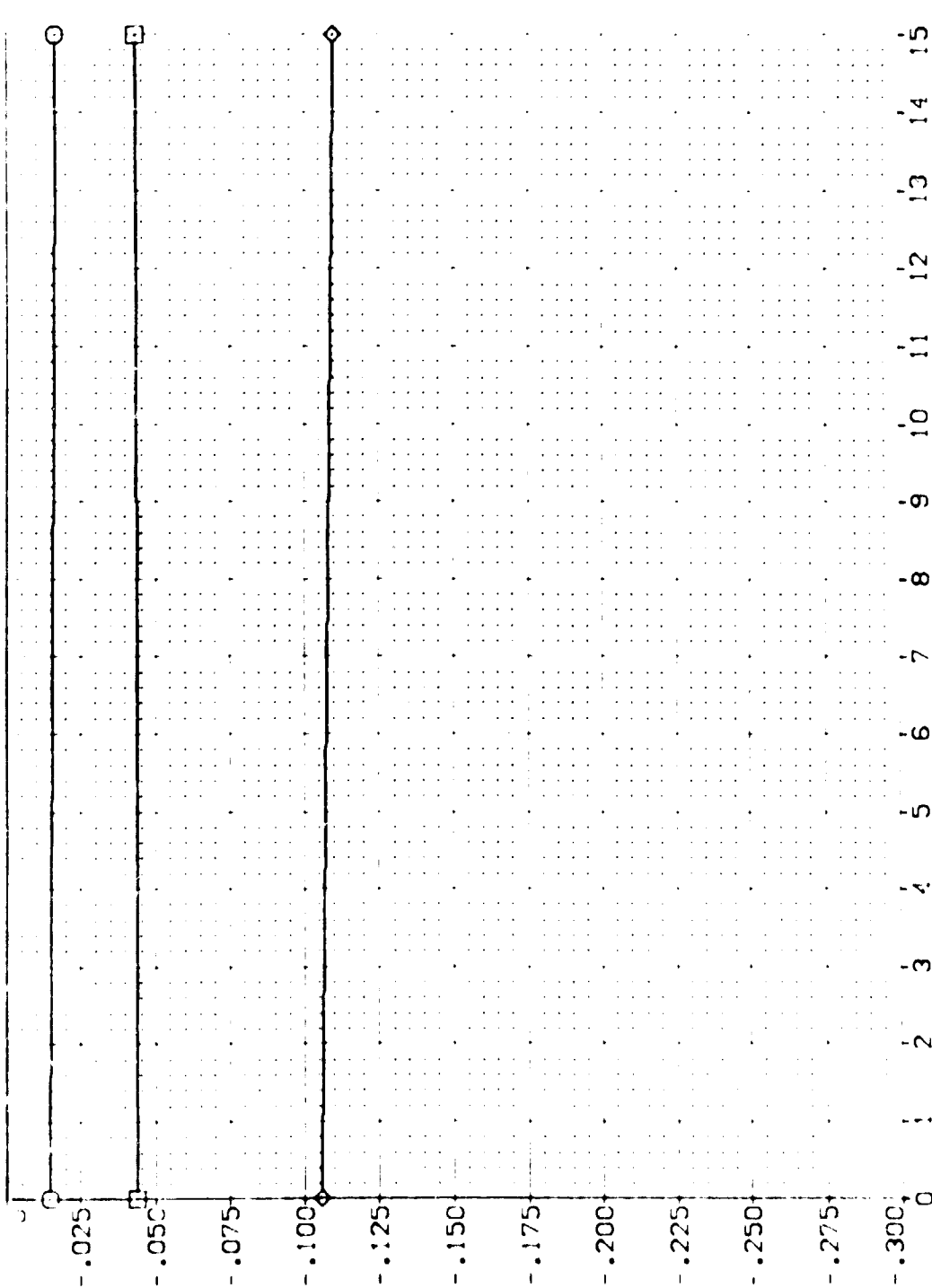


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	.800	BETA	ELEV-L	SREF 2.4210 SQ.FT.
◇	10.000	7.500	AILRON	EEJ006	LRUF 14.2440
◇	20.000	-11.700	SPOBRK	EEJ003	BRUF 28.1004
		.000	ELEV-R	EEJ003	XRUF 32.3010
				EEJ003	YMRP .0000
				EEJ003	ZMRP 11.2500
				SCALE	.0300

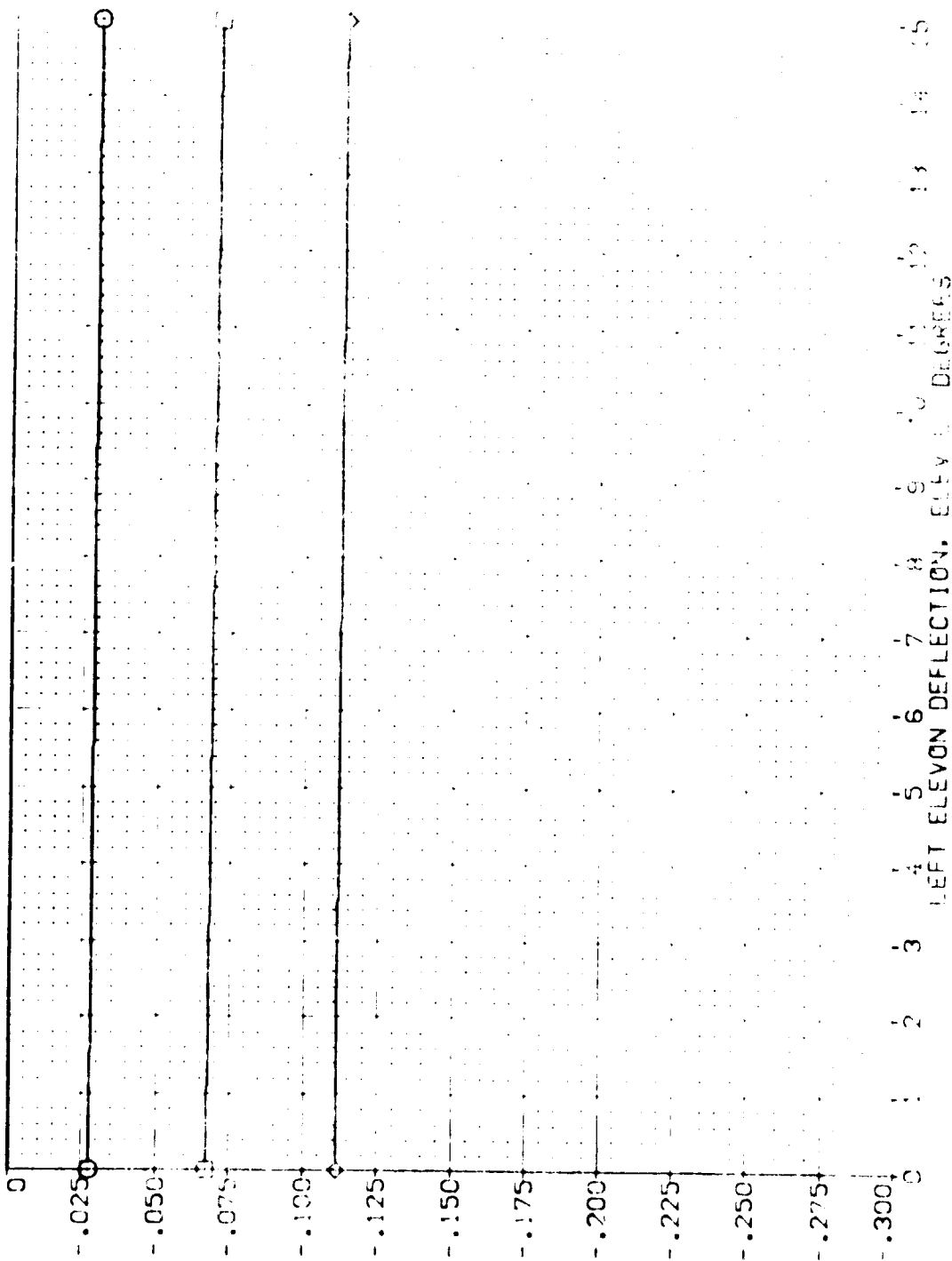


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES



(900233)

000000

ALPHA  
1000  
10.000  
20.000

1000  
 1000  
 1000  
 1000

PARAMETRIC VALUES	BETA	ALPHA	SPREAD	ELEV-R
	.900	7.500	1.700	.000

DATA SET	DATE	TIME	FILE
0001	0001	0001	0001
0002	0002	0002	0002
0003	0003	0003	0003
0004	0004	0004	0004
0005	0005	0005	0005
0006	0006	0006	0006
0007	0007	0007	0007
0008	0008	0008	0008
0009	0009	0009	0009
0010	0010	0010	0010
0011	0011	0011	0011
0012	0012	0012	0012
0013	0013	0013	0013
0014	0014	0014	0014
0015	0015	0015	0015
0016	0016	0016	0016
0017	0017	0017	0017
0018	0018	0018	0018
0019	0019	0019	0019
0020	0020	0020	0020
0021	0021	0021	0021
0022	0022	0022	0022
0023	0023	0023	0023
0024	0024	0024	0024
0025	0025	0025	0025
0026	0026	0026	0026
0027	0027	0027	0027
0028	0028	0028	0028
0029	0029	0029	0029
0030	0030	0030	0030
0031	0031	0031	0031
0032	0032	0032	0032
0033	0033	0033	0033
0034	0034	0034	0034
0035	0035	0035	0035
0036	0036	0036	0036
0037	0037	0037	0037
0038	0038	0038	0038
0039	0039	0039	0039
0040	0040	0040	0040
0041	0041	0041	0041
0042	0042	0042	0042
0043	0043	0043	0043
0044	0044	0044	0044
0045	0045	0045	0045
0046	0046	0046	0046
0047	0047	0047	0047
0048	0048	0048	0048
0049	0049	0049	0049
0050	0050	0050	0050
0051	0051	0051	0051
0052	0052	0052	0052
0053	0053	0053	0053
0054	0054	0054	0054
0055	0055	0055	0055
0056	0056	0056	0056
0057	0057	0057	0057
0058	0058	0058	0058
0059	0059	0059	0059
0060	0060	0060	0060
0061	0061	0061	0061
0062	0062	0062	0062
0063	0063	0063	0063
0064	0064	0064	0064
0065	0065	0065	0065
0066	0066	0066	0066
0067	0067	0067	0067
0068	0068	0068	0068
0069	0069	0069	0069
0070	0070	0070	0070
0071	0071	0071	0071
0072	0072	0072	0072
0073	0073	0073	0073
0074	0074	0074	0074
0075	0075	0075	0075
0076	0076	0076	0076
0077	0077	0077	0077
0078	0078	0078	0078
0079	0079	0079	0079
0080	0080	0080	0080
0081	0081	0081	0081
0082	0082	0082	0082
0083	0083	0083	0083
0084	0084	0084	0084
0085	0085	0085	0085
0086	0086	0086	0086

DATA SOURCE  
ELEV-L  
.000

CASET  
ELEV-L  
15.000

3306  
3307  
3308  
3309  
3310

REFERENCE IN DAY	SCALE
50.17	
14.210	
14.245	
28.104	
32.3019	
3000	
11.500	
1000	

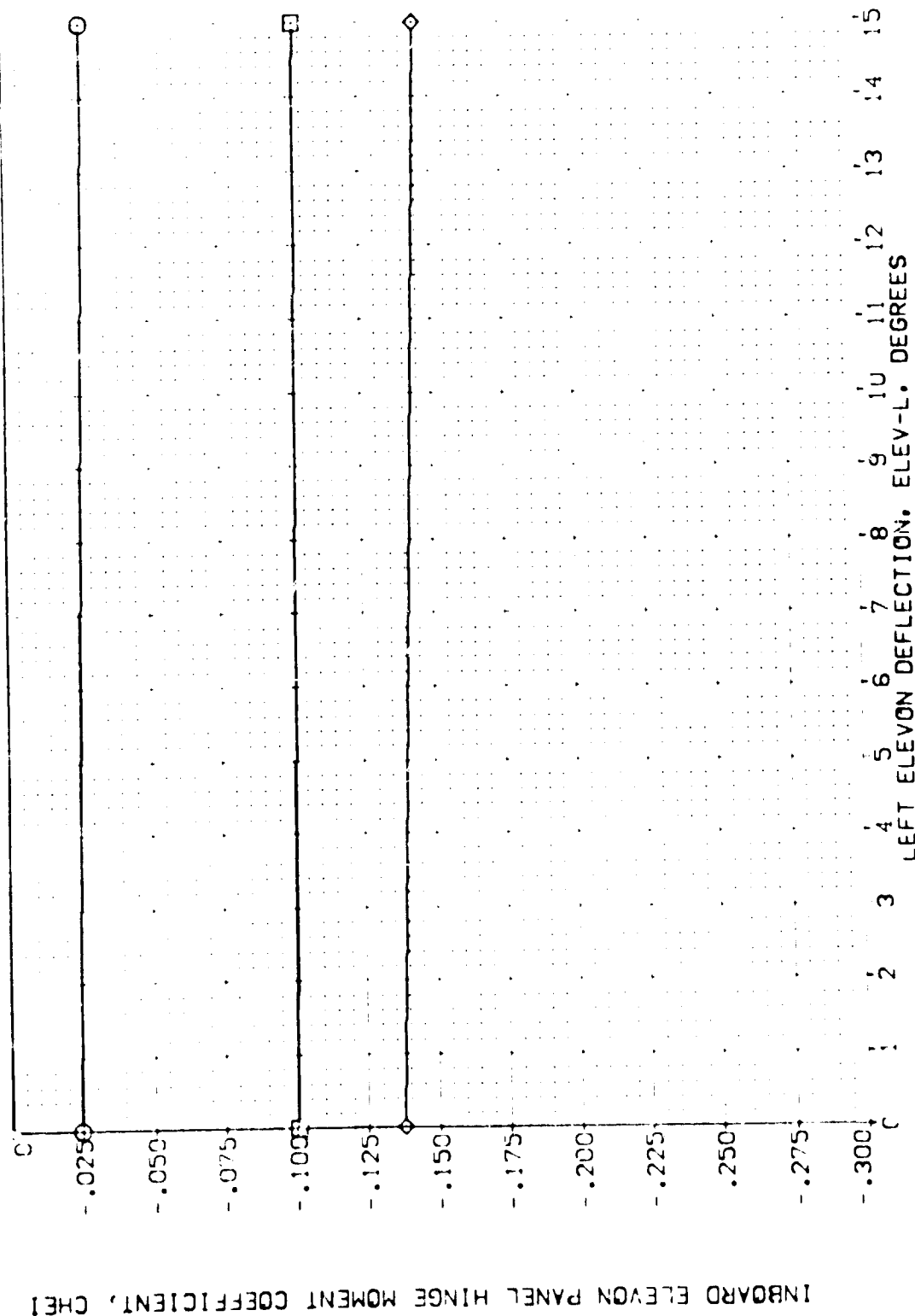


FIG. 44 AILERON INTERACTIONS. RIGHT ELEVON= 15 DEGREES

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	1.050	BETA	EEJ003	SREF 2.4210 SQ.FT.
□	10.000	7.500	AILRON	EEJ006	LREF 14.2440 IN.
◇	20.000	-11.700	SPOBRK	EEJ003	BREF 28.1004 IN.
		.000	ELEV-R	EEJ003	YMRP 32.3010 IN.
		10.000	ELEV-L	EEJ003	ZMRP .0000 IN.
		20.000	ELEV-L	EEJ003	SCALE 11.2500 IN.
					SCALE .0300

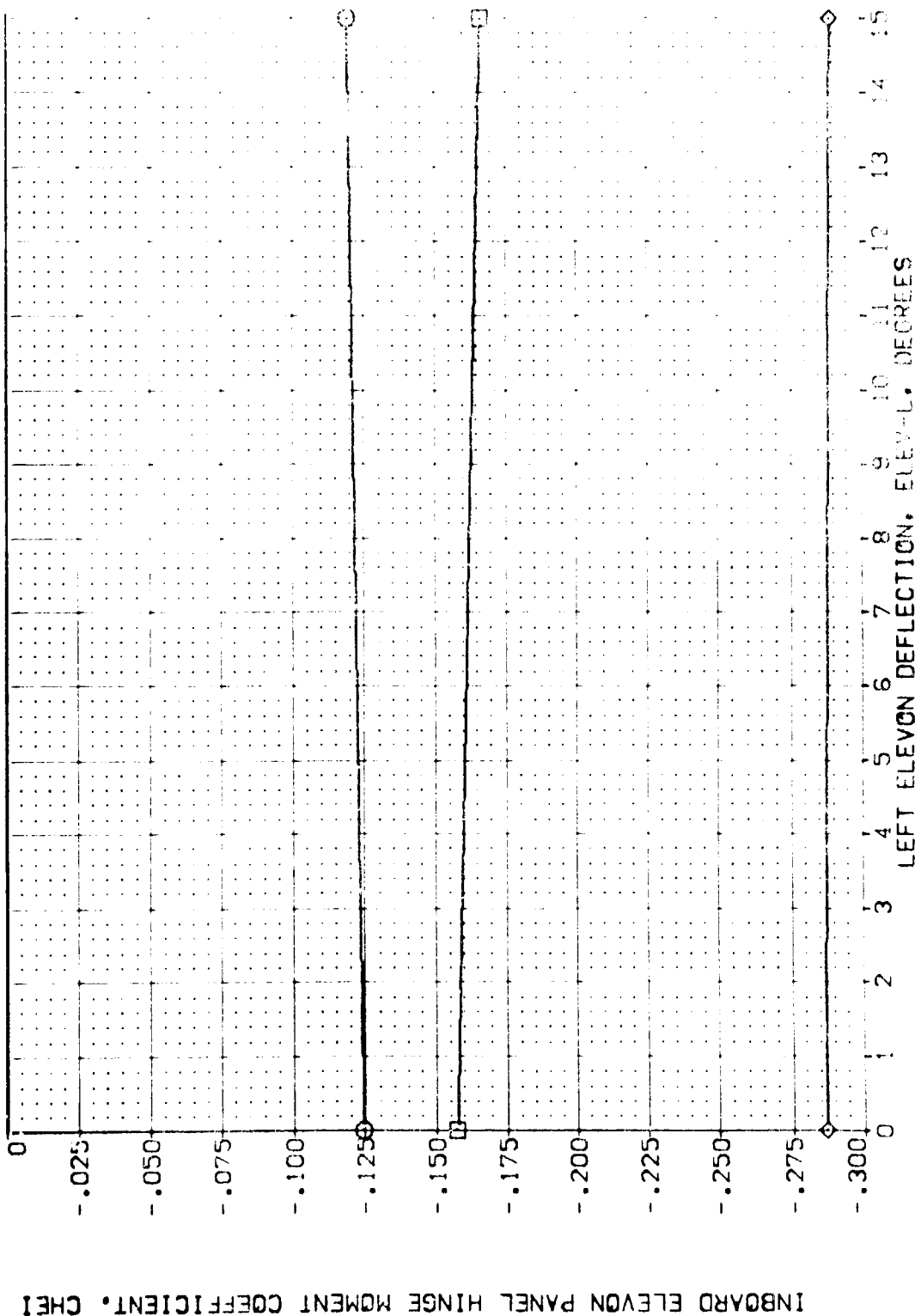


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 GA53A B C M F W I V RN/L = 3.0 (EEJ006)

100-100000

ALPHA  
10.000  
20.000

MACH  
ELEVON  
BOFLAP  
FLUDDER

PARAMETRIC VALUES

DATA SET	EEJ006
000.	000.
-7.500	000.
25.000	000.
15.000	000.

DATA SOURCE  
ELEV-L  
.000

DATASET 15,000  
ELEV-L

2305  
2306  
2307  
2308

REFERENCE IN  
2.4210  
14.2440  
28.1004  
32.3010

*[Faint handwritten notes]*

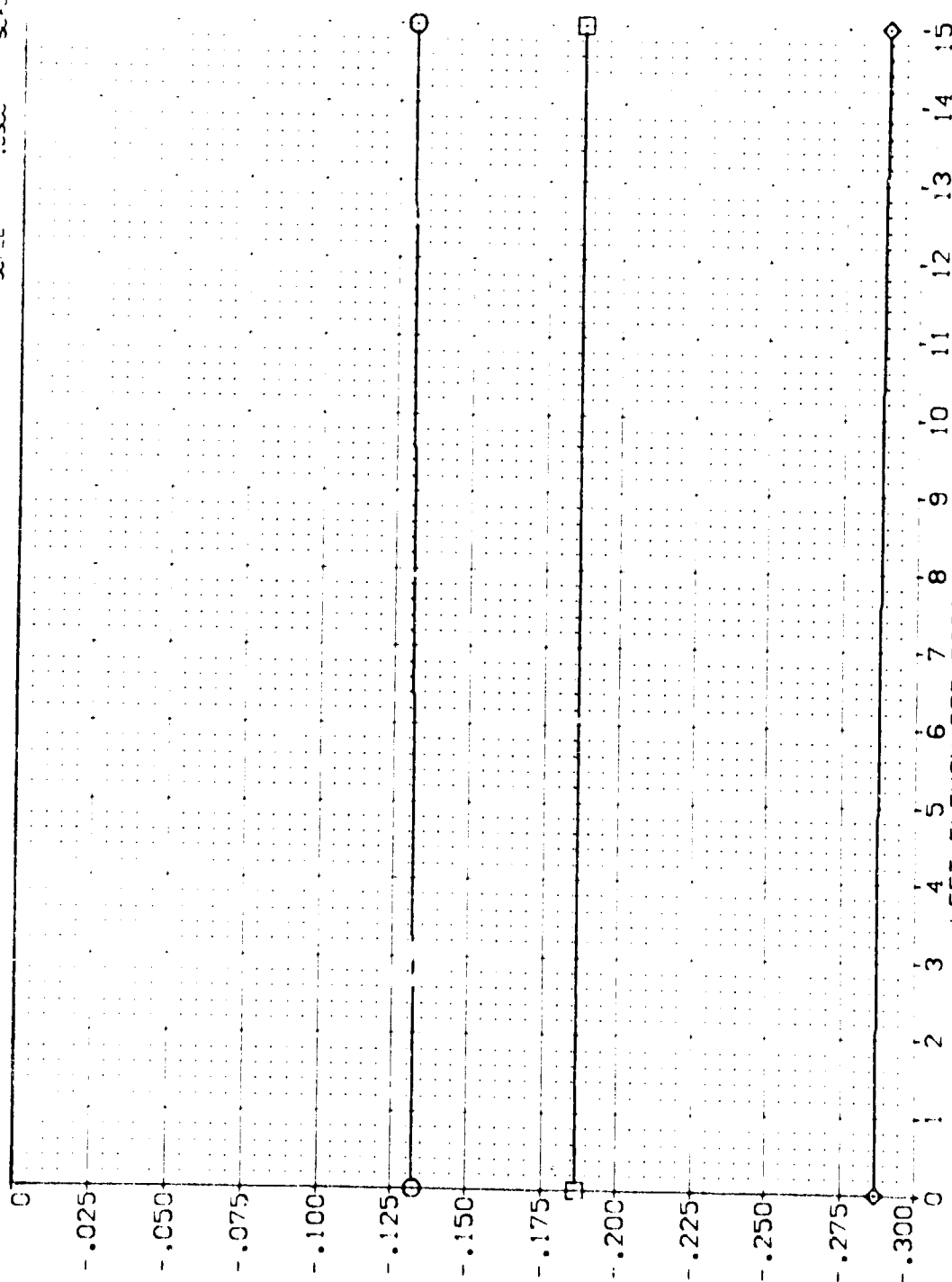


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
○	.000	.60	BETA	ELEV-L	SREF 2.4210
□	10.000	7.500	AILRON	EEJ006	LREF 14.2440
◇	20.000	-11.700	SPOBRK	EEJ003	BREF 28.1004
		.000	ELEV-R		XMRP 32.3010
					YMRP .0000
					ZMRP 11.2500
					SCALE .0000

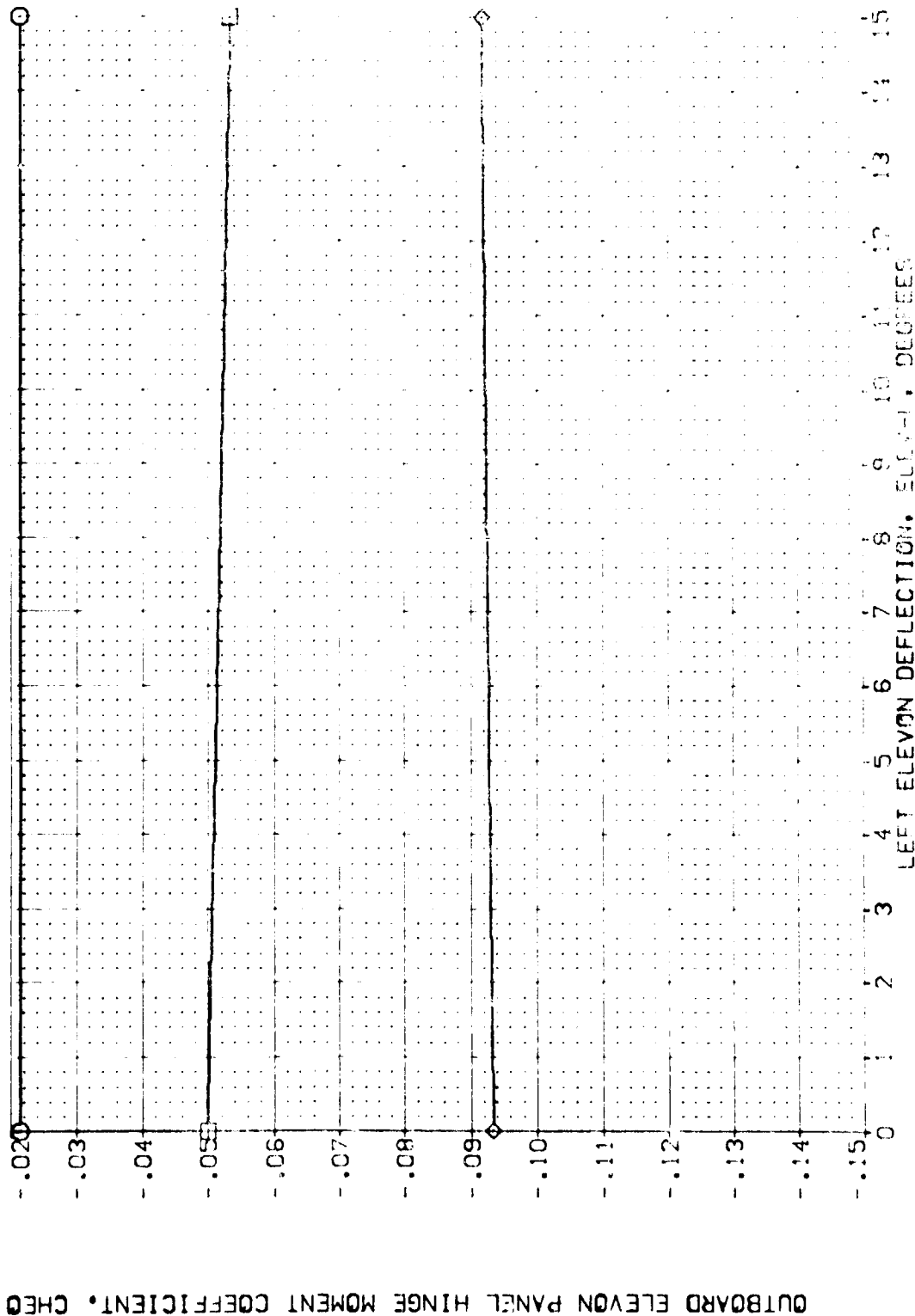


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL  
 ○ □ ◇

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	.000	EEJ006	SREF	2.4210
.000	ELEVON	.800	.000	LRREF	14.2440
10.000	BDFLAP	7.500	.000	BRREF	28.1004
20.000	RUDDER	-11.700	25.000	XMRP	32.3010
		.000	15.000	YMRP	11.2500
				ZMRP	11.2500
				SCALE	.0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>H20</sub>

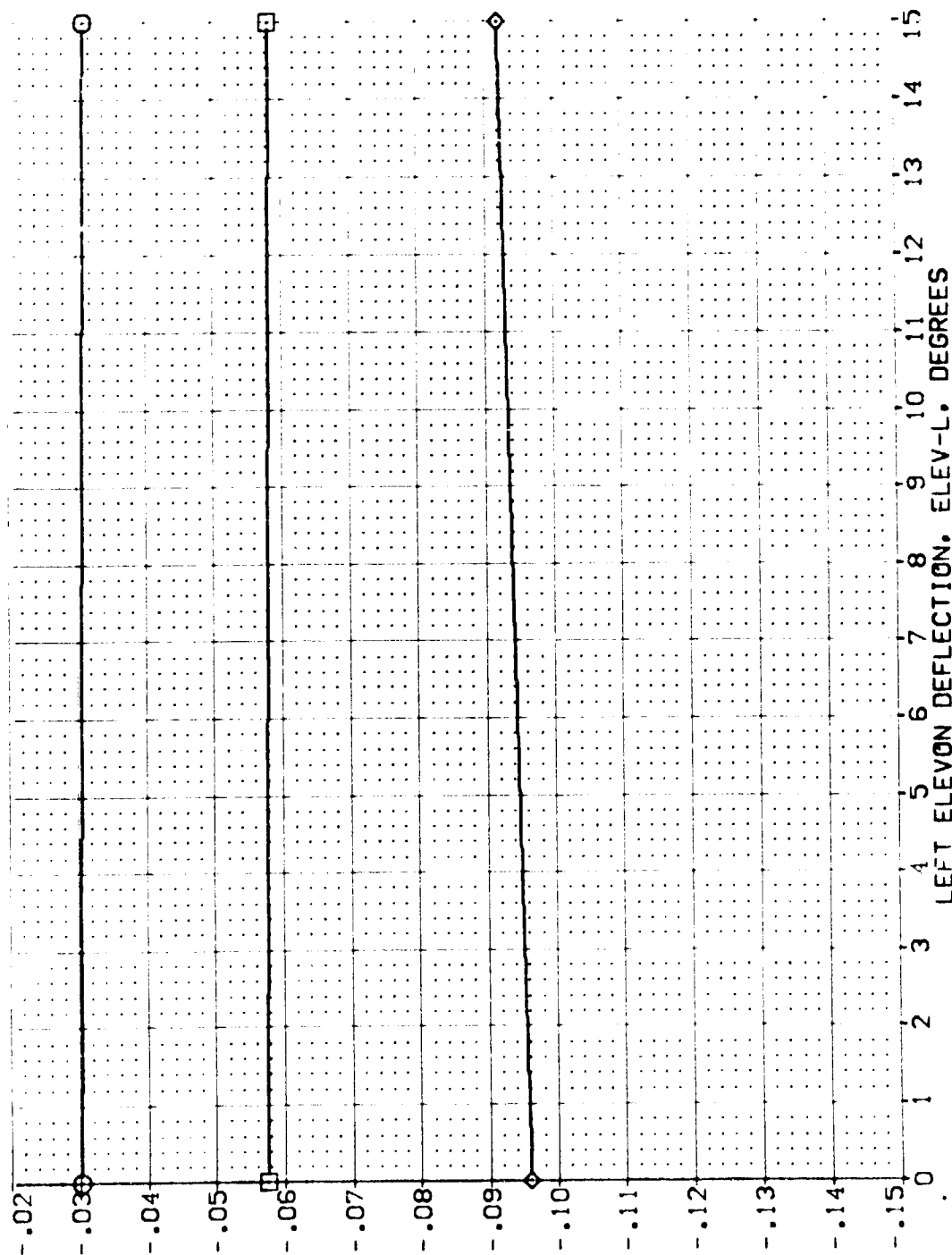


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W I V RN/L = 3.0 (EEJ006)

SYMBOL

○ □ ◇

PARAMETRIC VALUES

MACH .000  
ELEVON 10.000  
BOFLAP 20.000  
RUDDER .000

DATA SOURCE

BETA .900  
AILRON 7.500  
SPDRK -11.700  
ELEV-R .000

DATA SET

EEJ006  
-7.500  
25.000  
15.000

REFERENCE INFORMATION

SREF 2.4210  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3010  
YMRP .0000  
ZMRP 11.2500  
SCALE .0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HEQ</sub>

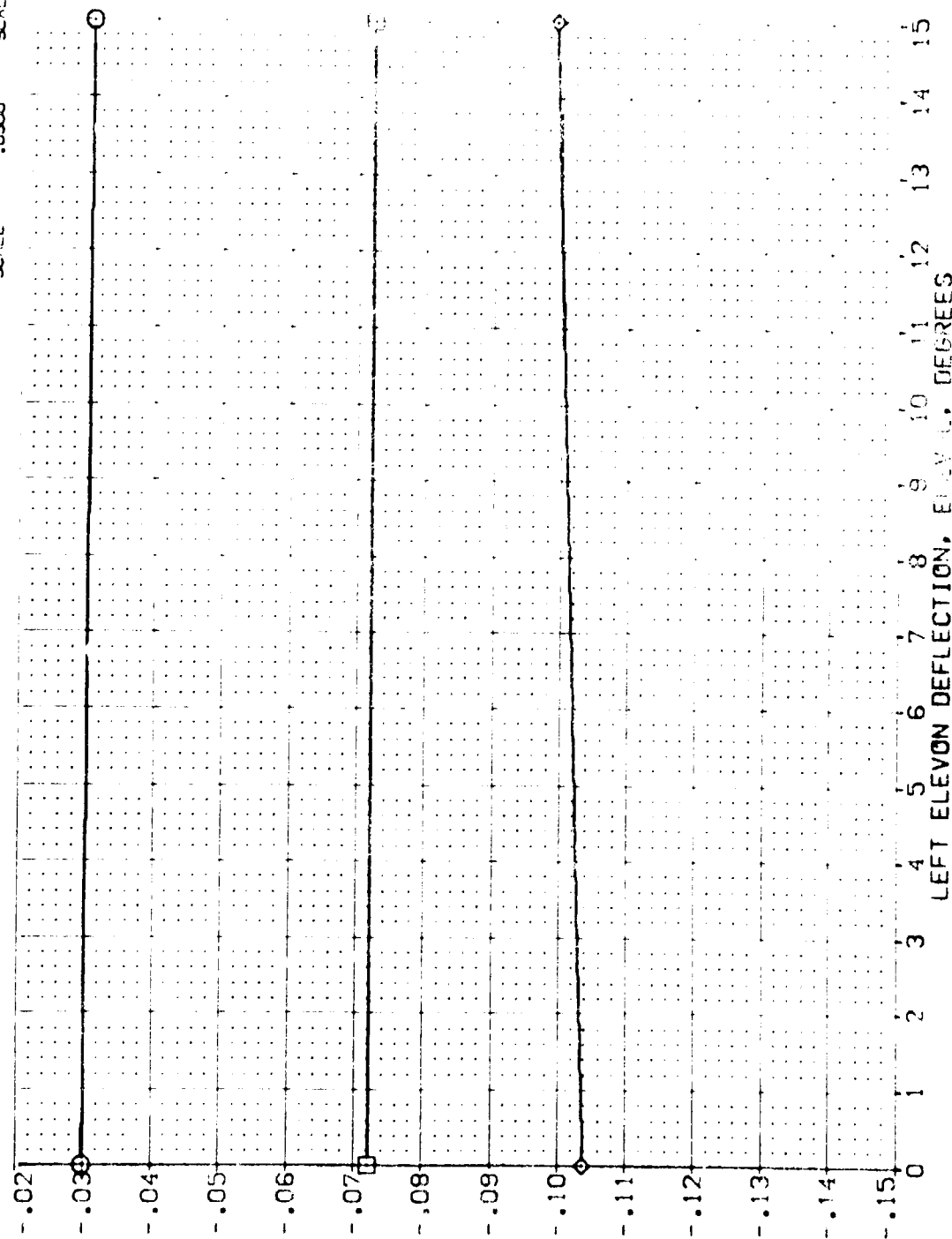


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL	PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
	ALPHA	MACH	BETA	AILERON	DATA SET	ELEV-L	ELEV-L	SREF	LREF	SO.FT.
○	.000	1.050	7.500	-11.700	.000	EEJ006	15.000	2.4210	14.2440	11.2
□	10.000	ELEVON	AILERON	SPDBRK	-7.500	EEJ006	15.000	28.1004	32.3010	11.2
◇	20.000	BUFLAP	AILERON	ELEV-R	25.000	15.000	15.000	11.2500	11.2500	11.2
		RUDDER						SCALE		SCALE

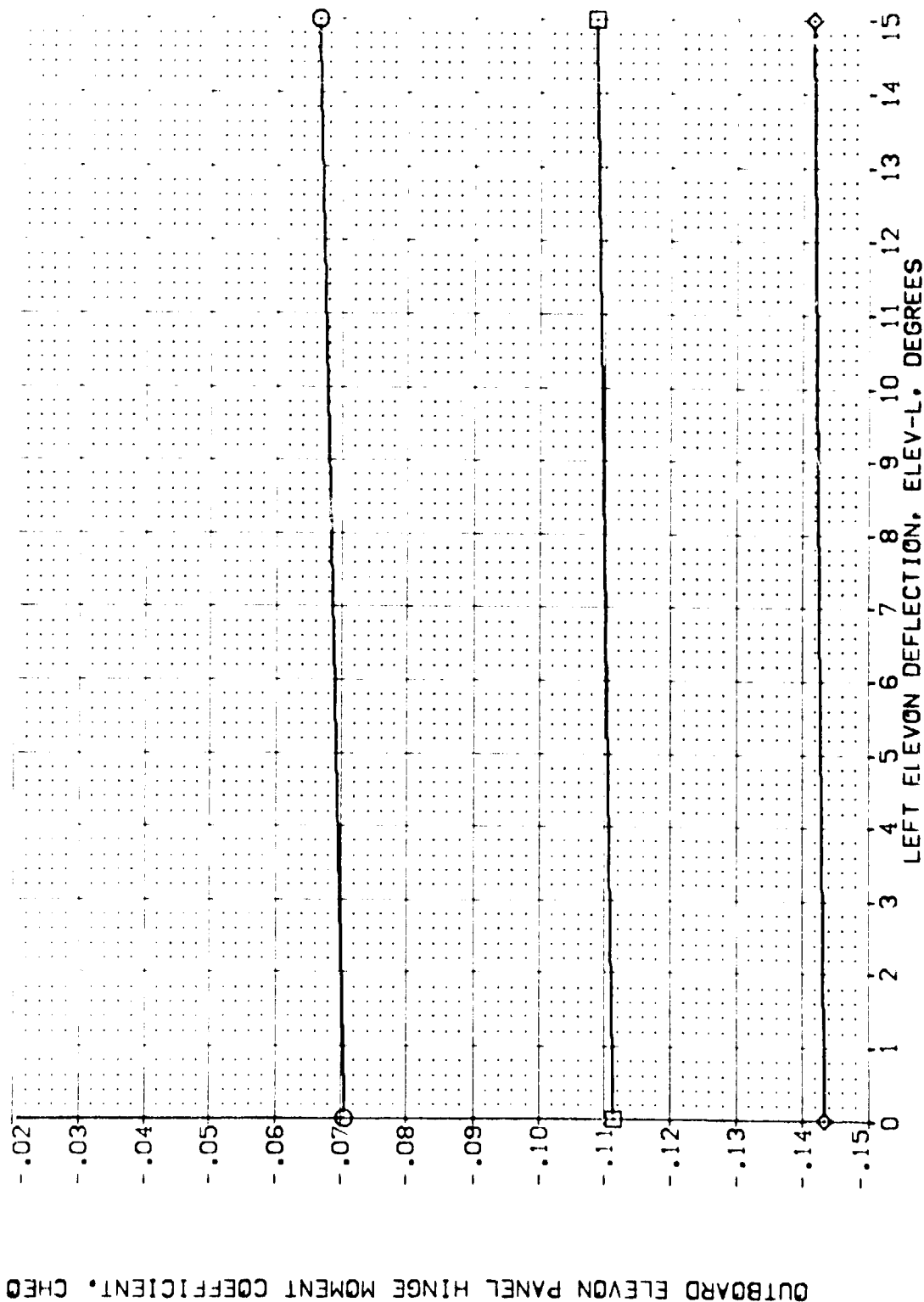


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES

ARC 11-747 0A53A B C M F W1 V RN/L = 3.0 (EEJ006)

SYMBOL

ALPHA  
0.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH 1.200  
ELEVON 7.500  
BDFLAP -11.700  
RUDDER .000

DATA SOURCE  
ELEV-L .000  
DATASET EEJ006  
ELEV-R 15.000

REFERENCE INFORMATION  
SPREF 2.4210  
LREF 14.2440  
BREF 28.1004  
XMRD 32.3010  
YMRD .0000  
ZMRD 11.2500  
SCALE .0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HED</sub>

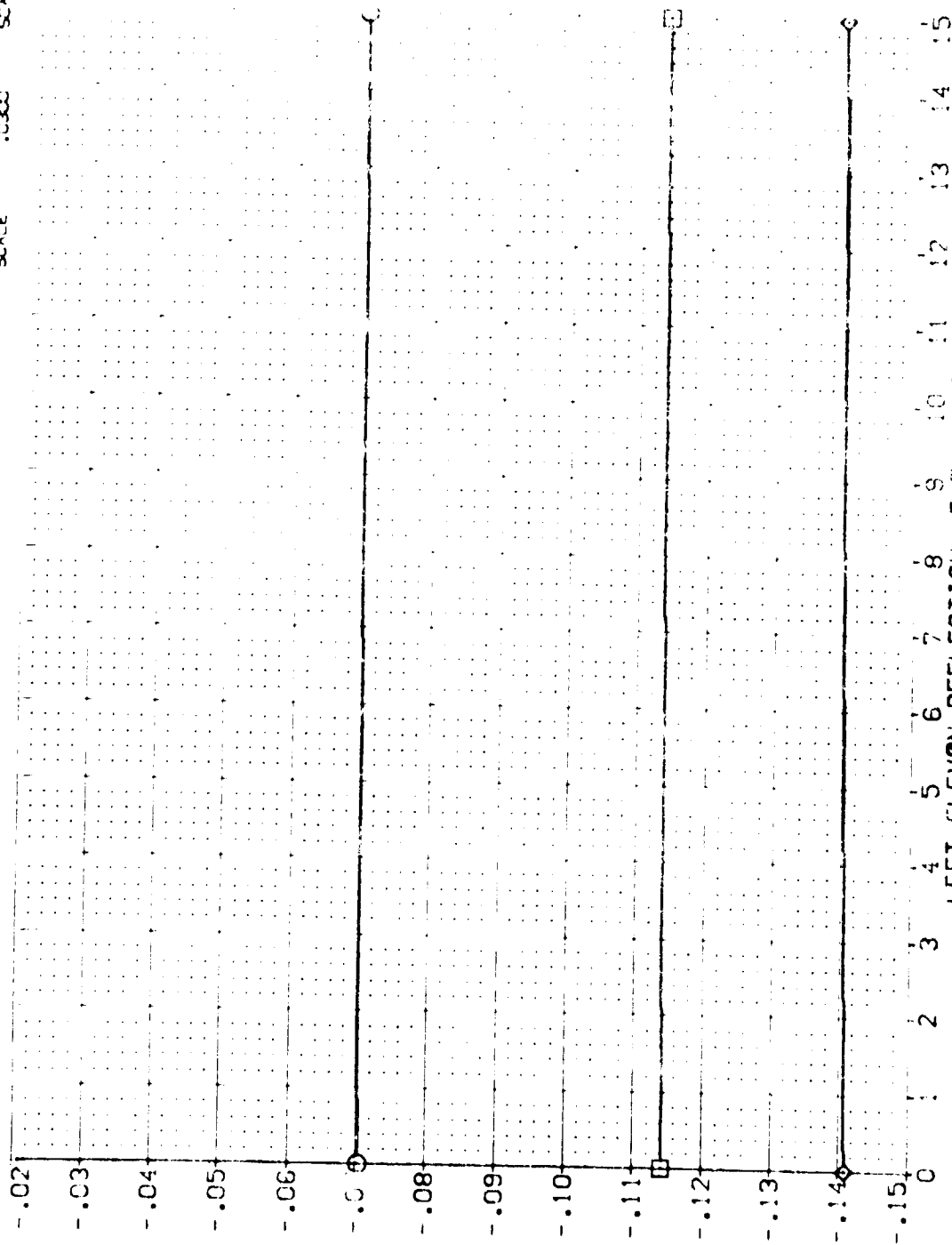


FIG. 44 AILERON INTERACTIONS, RIGHT ELEVON= 15 DEGREES



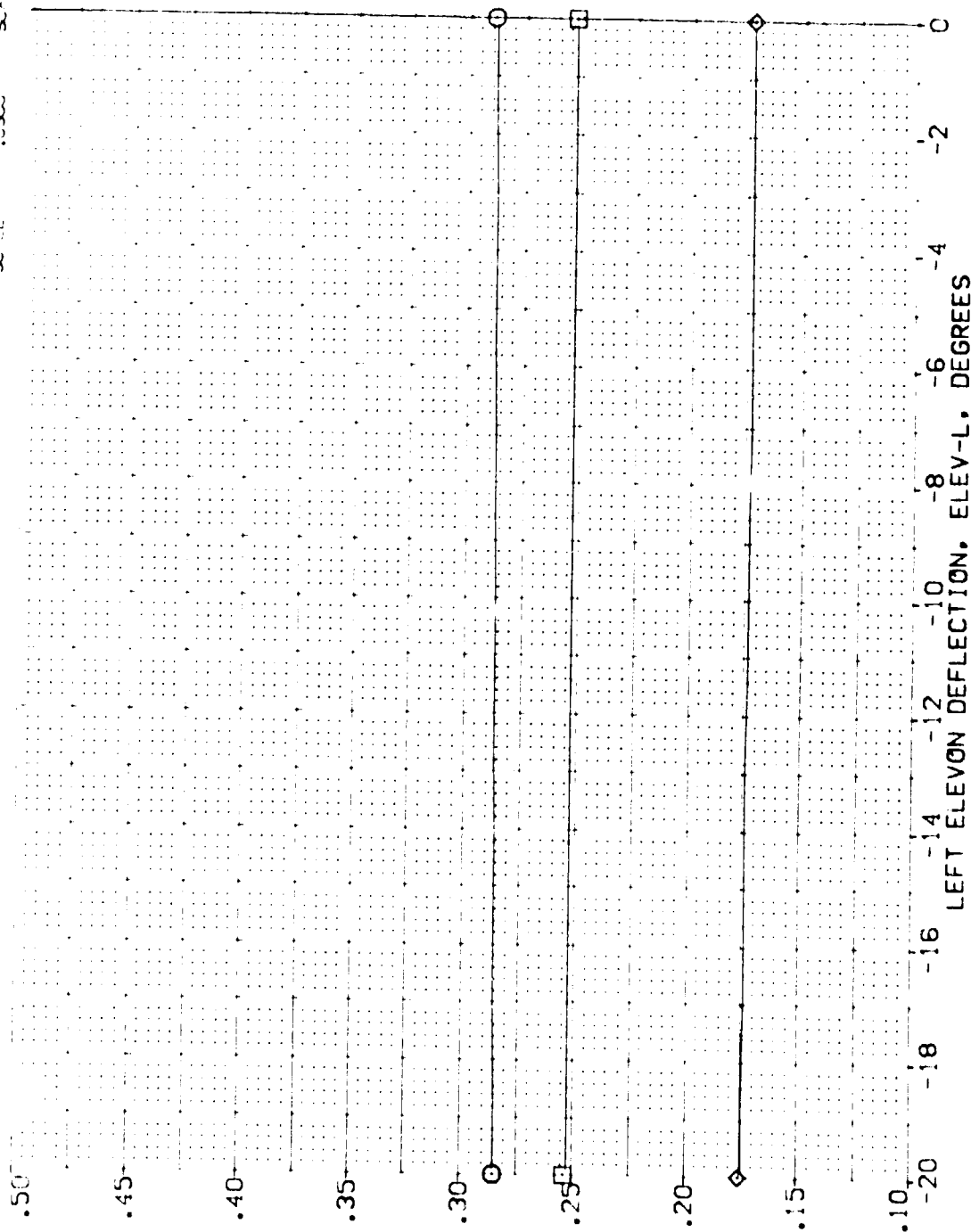
ARC 11-017 JAS3A B C M F W1 V NOM. RN/L (EEJ021)

SYMB  
O  
O

PARAMETRIC VALUES  
MICH .600 BETA  
FLAP -10.000 AILRON  
RUDDER -11.700 SPOBRK  
ELEV-R -20.000

DATA SOURCE  
ELEV-L .000  
ELEV-L  
ELEV-L  
ELEV-L

REFERENCE INFORMATION  
SPREF 2.4210 SCALF  
REF 14.2440  
REF 28.1004  
REF 30.3010  
REF .0000  
REF 11.2500  
SCALE



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHT

FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ021)

PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
ALPHA	MACH	BETA	ELEV-L	ELEV-L	SO. FT.
.000	.800	.000	.000	2.4210	2.4210
10.000	-10.000	10.000	10.000	14.2440	14.2440
20.000	-11.700	25.000	25.000	28.1004	28.1004
				32.3010	32.3010
				.0000	.0000
				11.2500	11.2500
				SCALE	SCALE

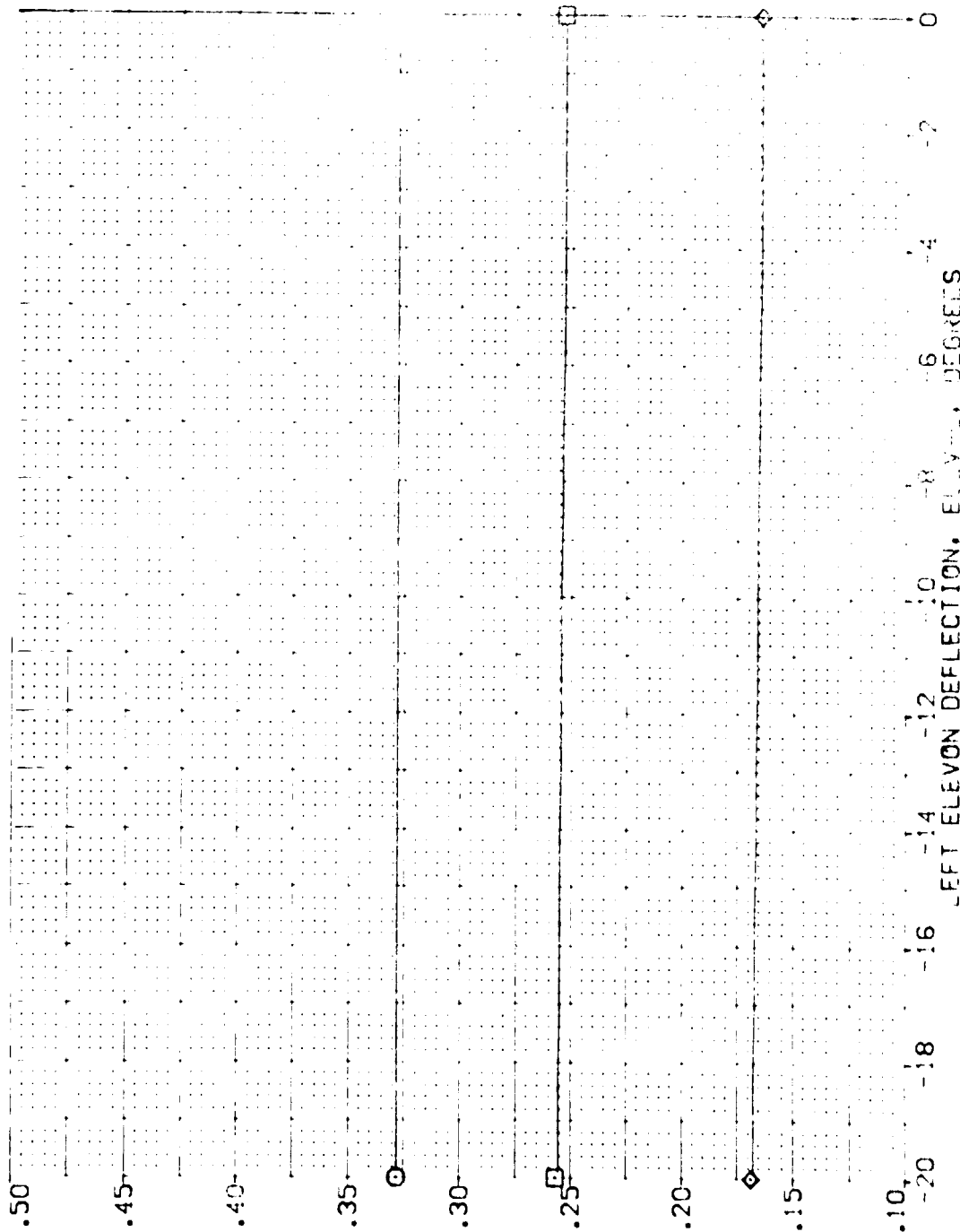


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ021)

**SYNOPSIS**

三

PARAMETRIC VALUES

DATA SOURCE

REFERENCE IS MADE TO:

000  
000  
000

NOV 20 1968

006	BETA
000	ALPHA
000	WEGA

000.000	DATASET
10.000	EEJ001
25.000	

000

E.V-L

000'02- 810P33  
7-A373 135V100

9. 22. 00

2308

2007

-20,000

2288

2000

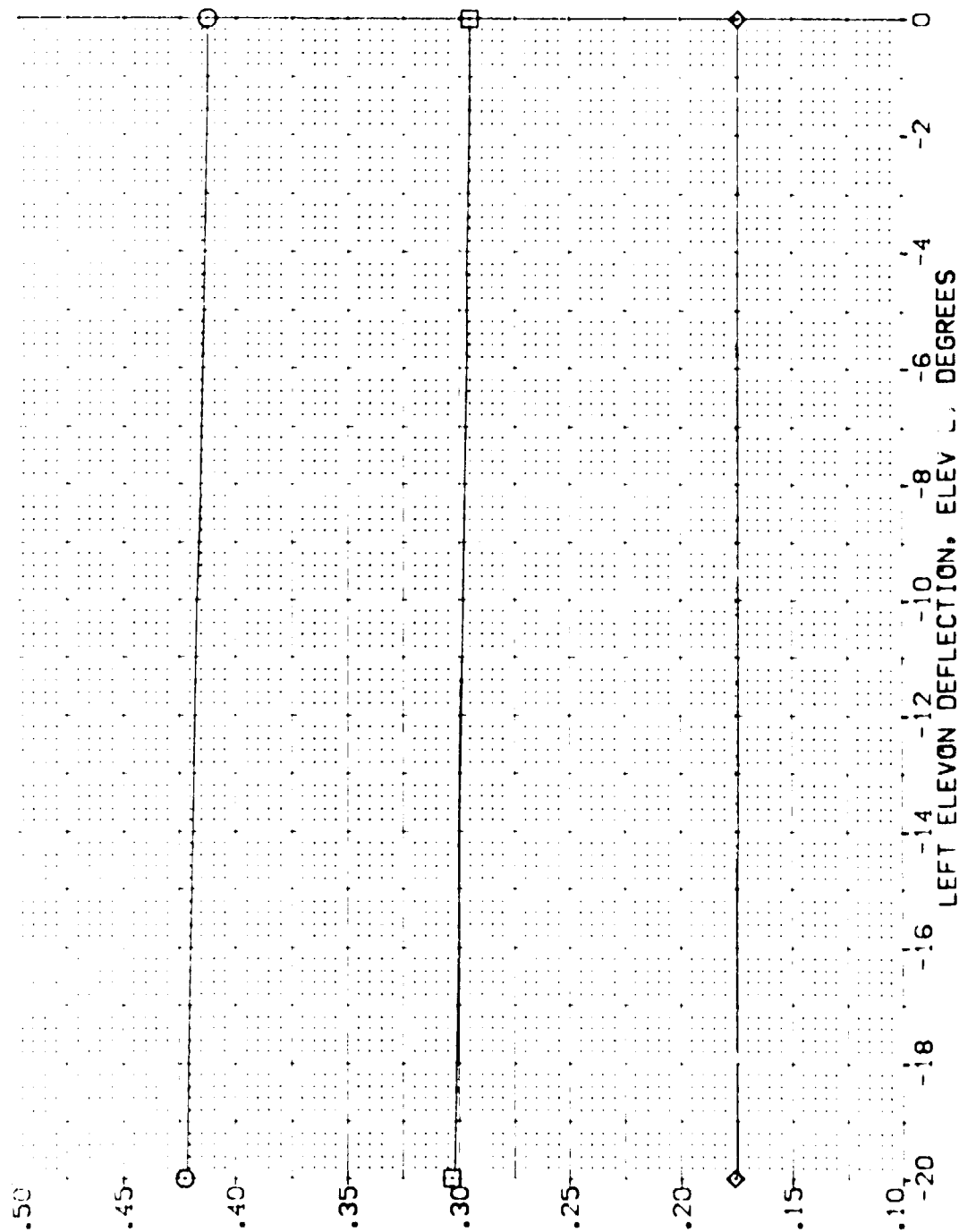


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

SYMBOL  
□ ◇

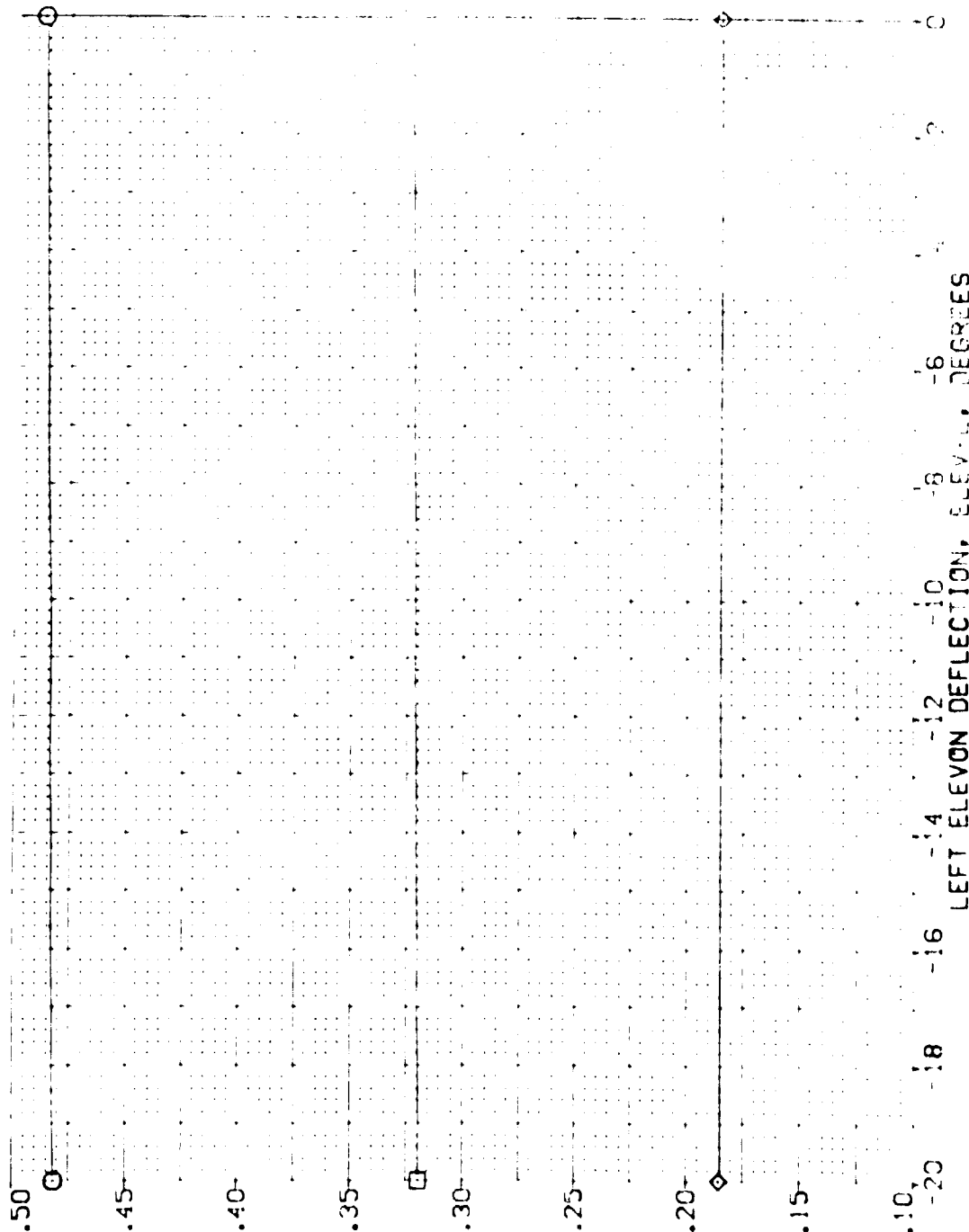
ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH 1.050  
ELEVON -10.000  
BOFLAP -11.700  
RUDDER .000

BETA  
AILRON 10.000  
SPOBRK 25.000  
ELEV-R -20.000

DATA SOURCE  
ELEV-L .000  
DATASET EEJ021  
ELEV-L -20.000  
DATASET EEJ019

REFERENCE INFORMATION  
SREF 2.4210  
LREF 14.2440  
BREF 28.1004  
XREF 32.3010  
YREF .0000  
ZREF 11.2500  
SCALE .0300



TOTAL ELEVON HINGE MOMENT COEFFICIENT, C<sub>HET</sub>

FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES  
LEFT ELEVON DEFLECTION, ELEV-L, DEGREES

ARC 11 1147 DAS24 B C M F W1 V NOM. RN/L (EEJ021)

SYMBOL		PARAMETRIC VALUES		DATA SOURCE		REFERENCE INFORMATION	
○	1.000	MACH	1.200	BETA	.000	ELEV-L	2.4210
○	10.000	1.100	10.000	ALTRON	10.000	ELEV-L	14.7440
○	20.000	300 LAP	1.100	SPORAN	25.000	ELEV-L	79.1001
		4000 R	.000	P. R	-20.000	ELEV-L	30.3010
						SCALE	.0000
						SCALE	11.7500
						SCALE	11.0000

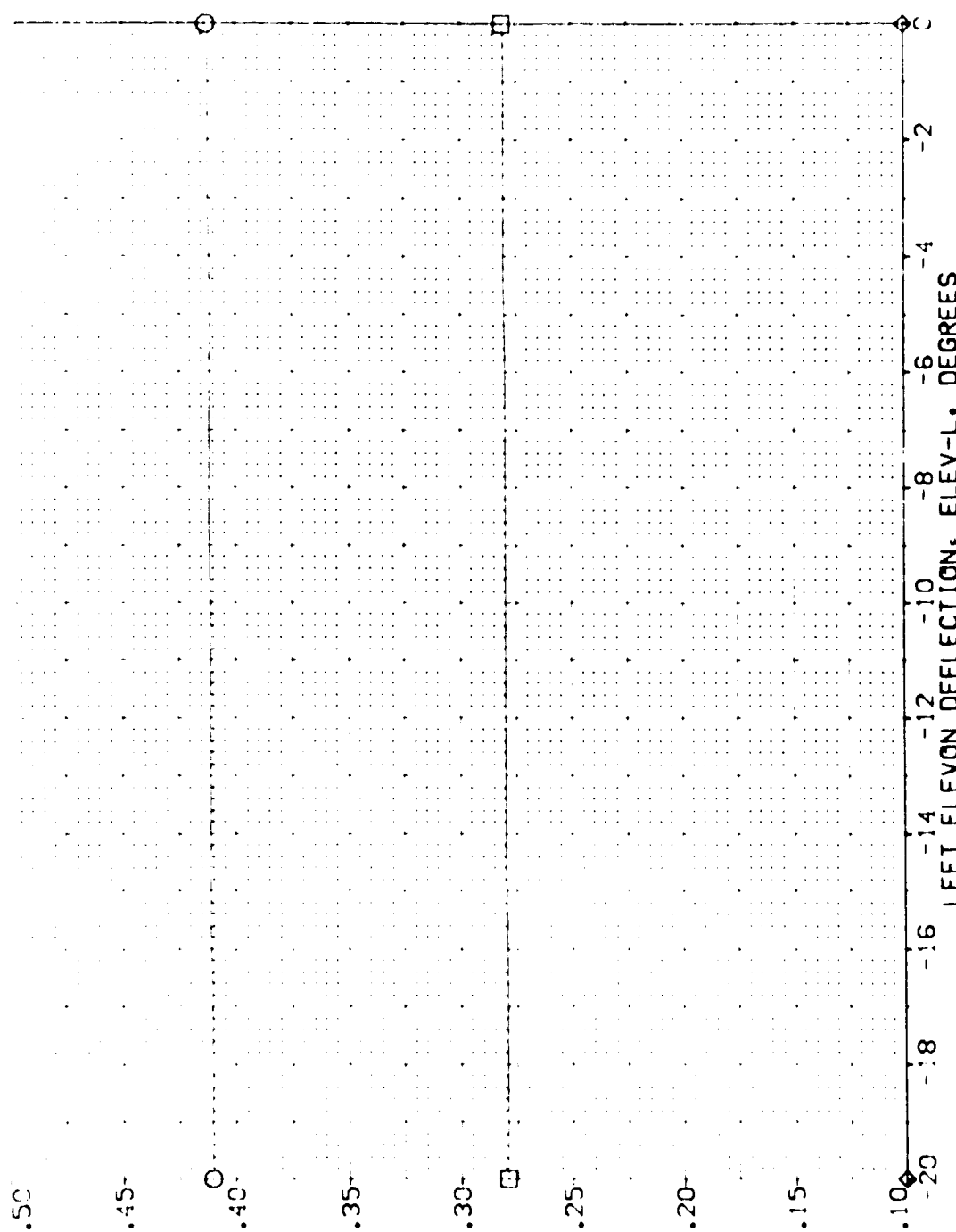


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ021)

ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
.000	.600	BETA	ELEV-L	SREF
10.000	-10.000	AILRON	.000	LREF
20.000	-11.700	SPOBRN	EEJ019	SREF
	.000	ELEV-R		XREF
				YREF
				ZREF
				SCALE

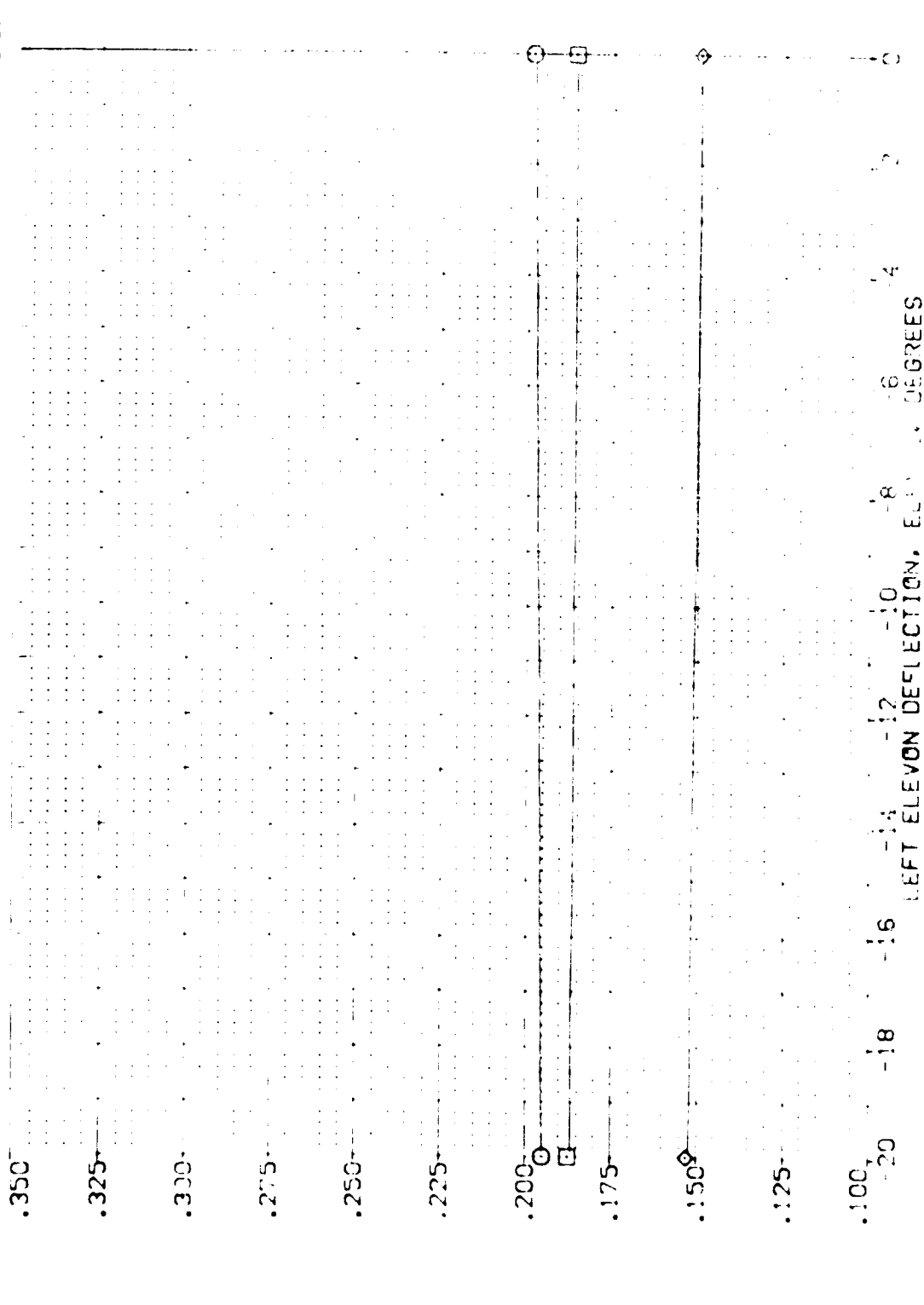


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES



SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
□	.000		BETA	ELEV-L	SREF
□	10.000	ELEVON	-10.000	EEJ021	REF
□	20.000	BOFLAP	-11.700	.000	28.1004
◇		RUDDER	ELEV-R	EEJ019	32.3010
					.0000
					11.2500
					.0300
					SCALE

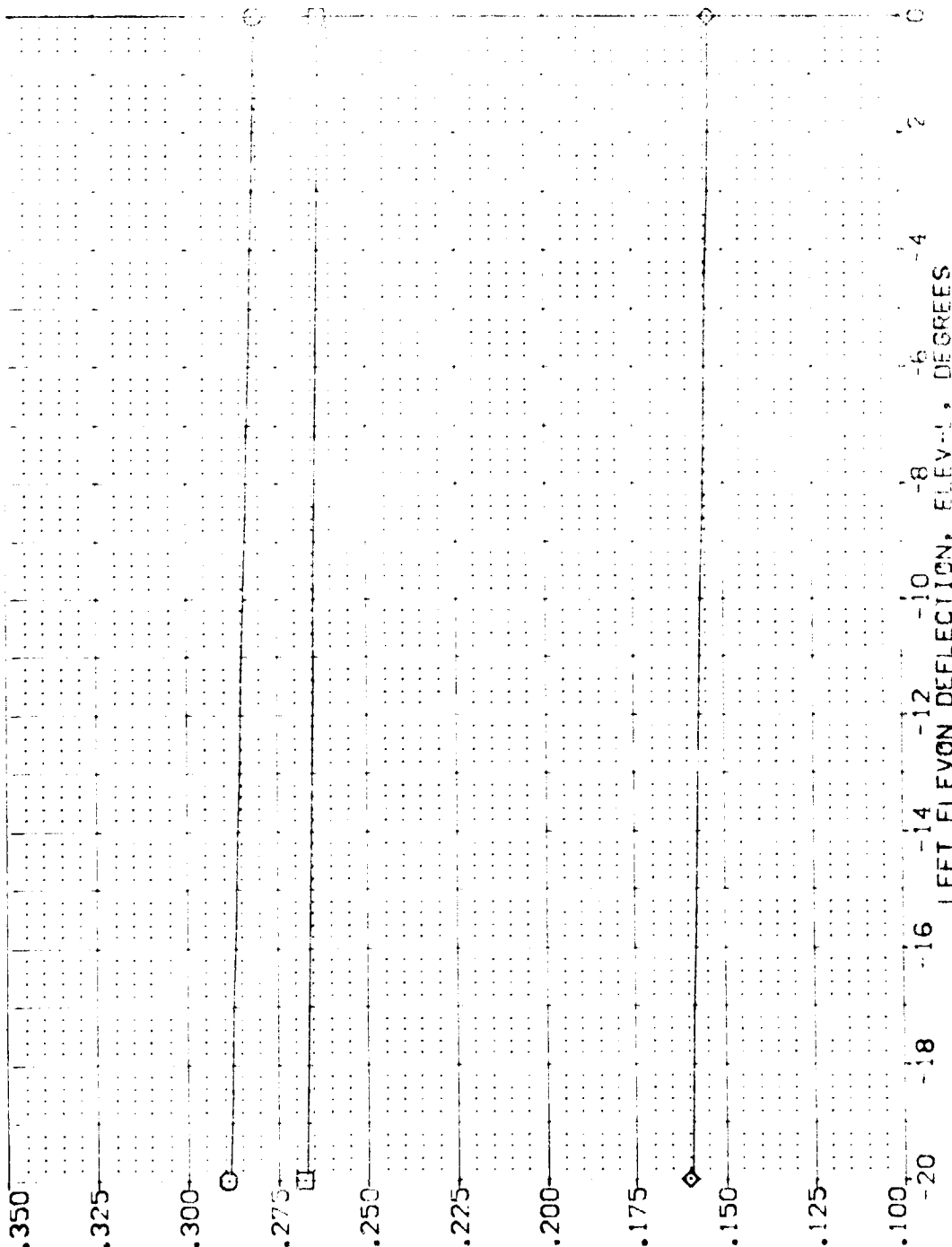


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ021)

SYMBOL		PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
ALPHA	MACH	BETA	ALTRON	SPDRK	ELEV-L	ELEV-R	DATA SET	ELEV-L	SPDRK	ELEV-R	SCALE
.000	1.050	10.000	10.000	25.000	.000	-20.000	EEJ021	.000	10.000	-20.000	10.000
10.000	1.050	10.000	10.000	25.000	.000	-20.000	EEJ021	.000	10.000	-20.000	10.000
20.000	1.050	10.000	10.000	25.000	.000	-20.000	EEJ021	.000	10.000	-20.000	10.000

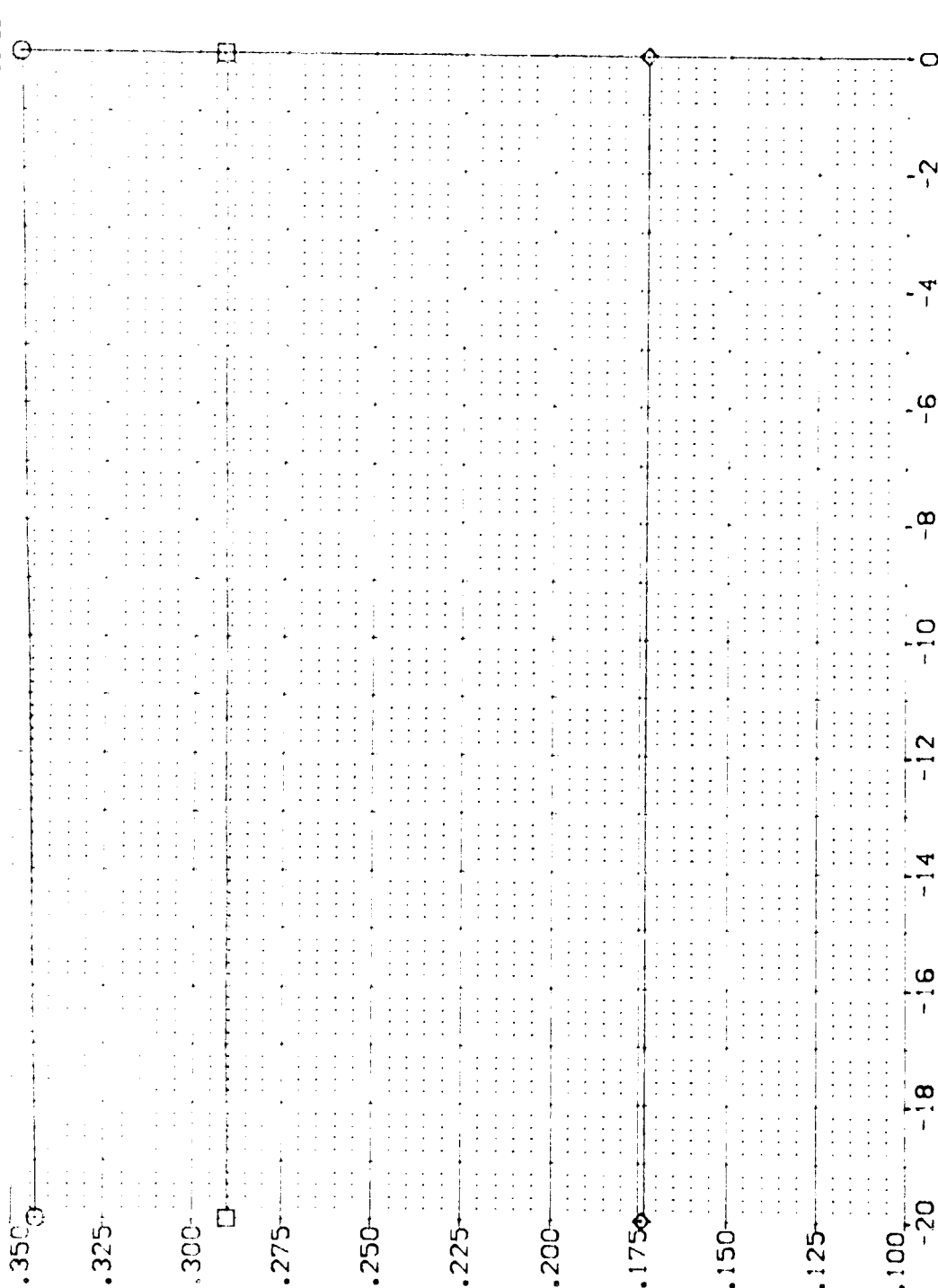


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ021)

SYMBOL  
 O  
 ◇

PARAMETRIC VALUES				DATA SOURCE		REFERENCE INFORMATION			
ALPHA	MACH	BETA	AILERON	DATA SET	ELEV-L	SREF	2.4210	14.2440	SQ. FT.
.000	1.200	-10.000	SPDRK	.000	EEJ019	REF	28.1004	32.3010	11.2300
10.000	ELEVON	-11.700	ELEV-R	10.000	25.000	YMRP	11.2300	SCALE	
20.000	BD FLAP	.000	ELEV-R	-20.000		ZMRP			
	RUDDER								

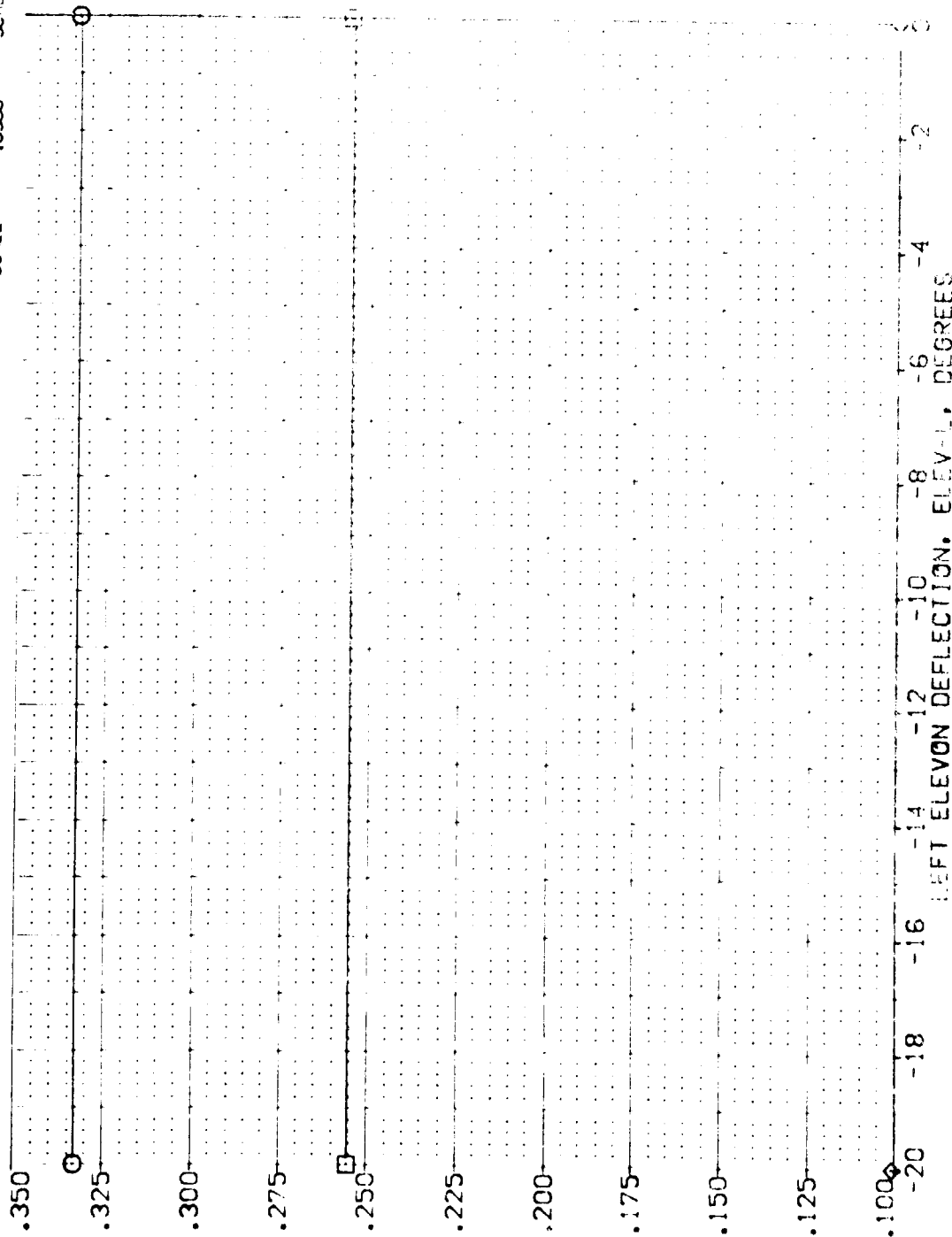


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES



SYMBOL	ALPHA	PARAMETRIC VALUES	DATA SOURCE	REFERENCE INFORMATION
	.000	BETA	ELEV-L	SREF
	10.000	-10.000	.000	14.2440
	20.000	-11.700	.000	28.1004
		SP08RK	EEJ019	32.3010
		ELEV-R		11.2500
				SCALE
				.0300

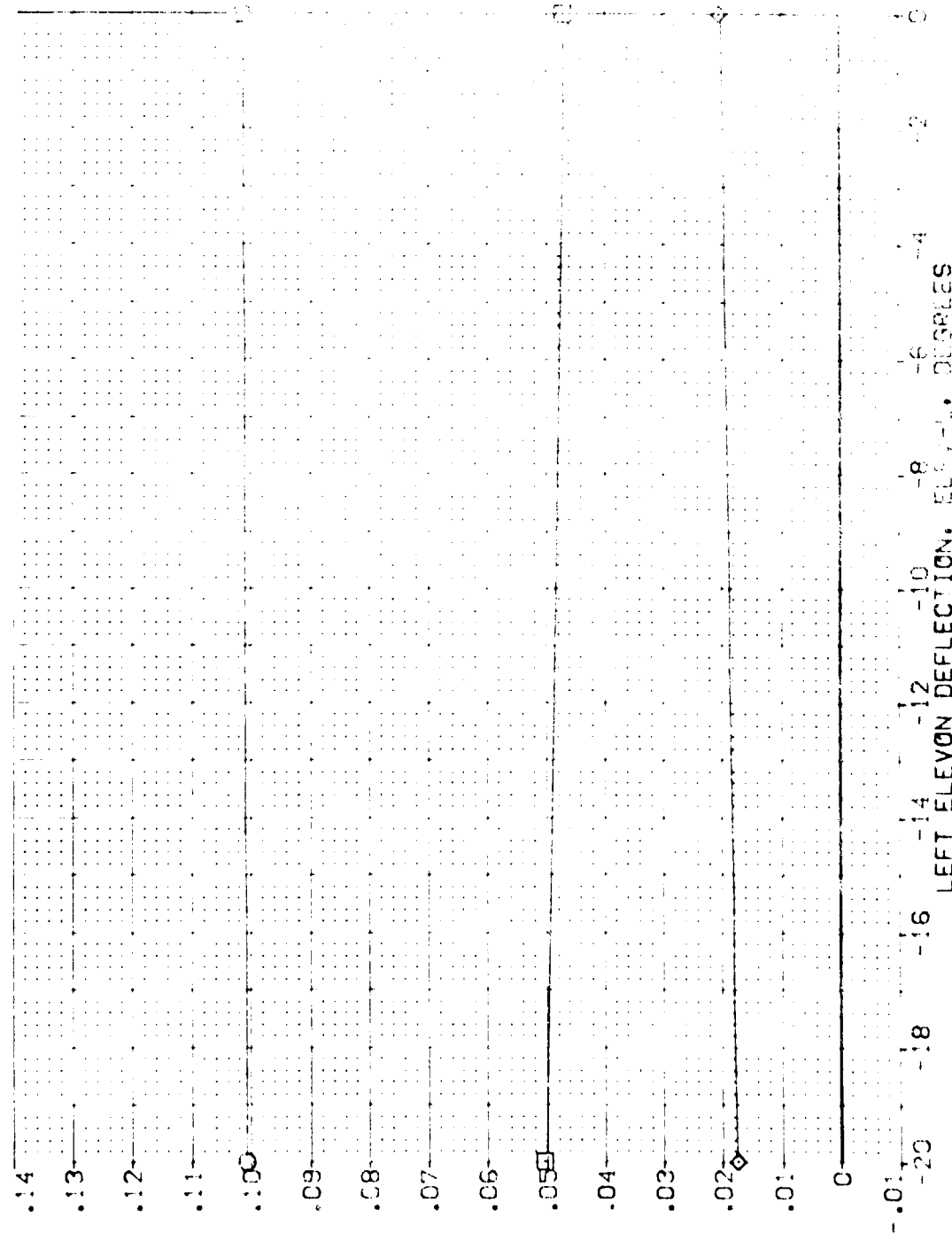


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ021)

SYMBOL	ALPHA	PARAMETRIC VALUES				DATA SOURCE				REFERENCE INFORMATION			
		MACH	BETA	.000	EEJ021	ELEV-L	.000	EEJ019	ELEV-L	SREF	2.4210	SC.FT.	
	.000												
	10.000		-10.000	AILRON	10.000	EEJ021	ELEV-L	-20.000	SREF	14.744	SC.FT.		
	20.000		-11.700	SPOBRK	25.000				SREF	28.004	SC.FT.		
									SREF	32.3010	SC.FT.		
									SREF	11.2500	SC.FT.		
									SREF	10.300	SC.FT.		

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHED

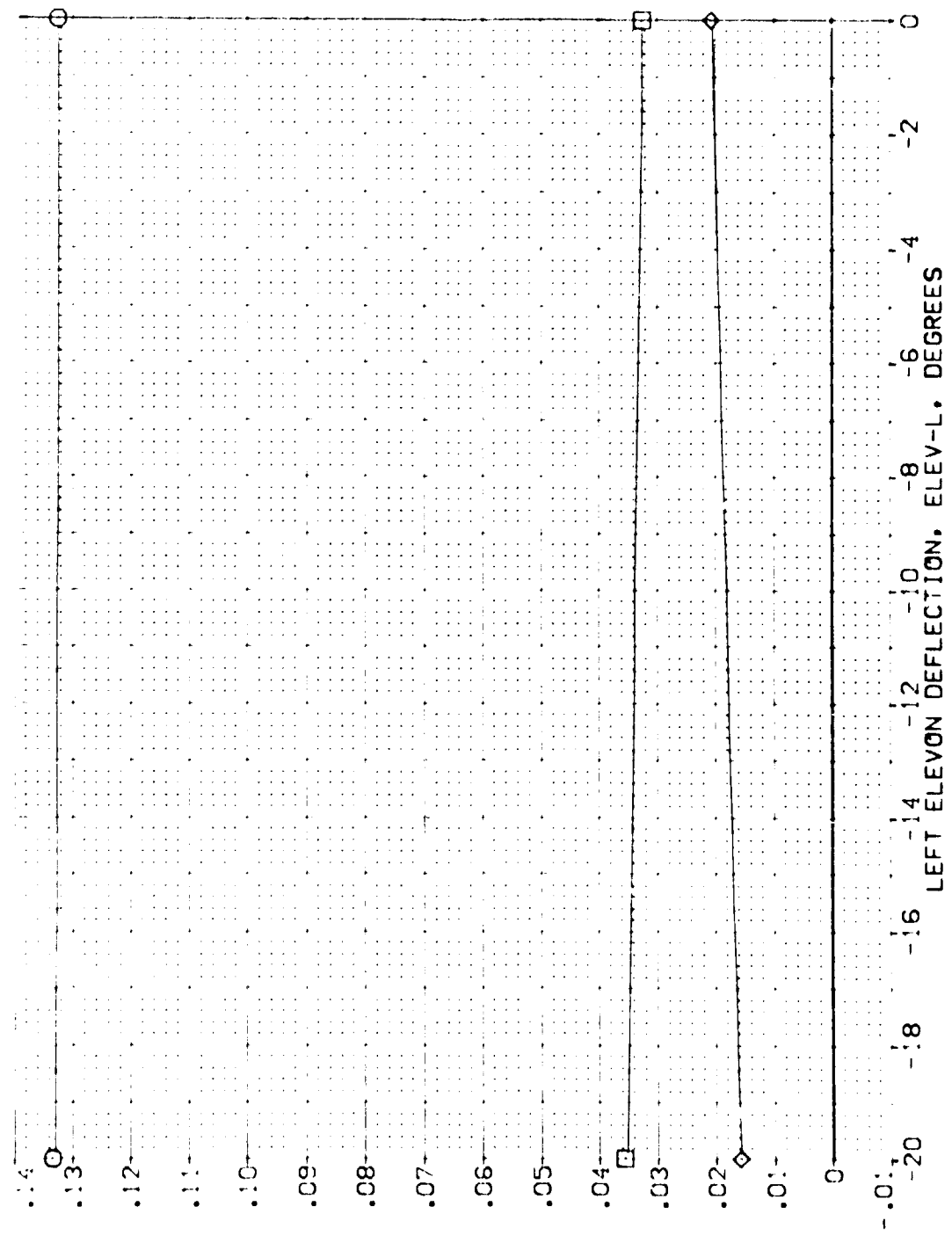


FIG. 45 AILERON INTERACTIONS. RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ021)

SYMBOL  
1110

PARAMETRIC VALUES  
ALPHA .000  
10.000  
20.000  
MACH  
ELEVON  
BOFLAP  
RUDDER  
1.050  
-10.000  
-11.700  
.000  
BETA  
AILRON  
SPDRK  
ELEV-R  
10.000  
25.000  
-20.000

DATA SOURCE  
ELEV-L  
.000  
DATASET  
EEJ021  
10.000  
25.000  
-20.000

REFERENCE INFORMATION  
SPREF  
REF  
SPREF  
YMPD  
ZMPD  
SCALE  
2.4210  
14.2440  
28.1004  
32.3010  
0.000  
11.2500  
0.000

OUTBOARD ELEVON PANEL HINGE MORPHO COEFFICIENT, CHER

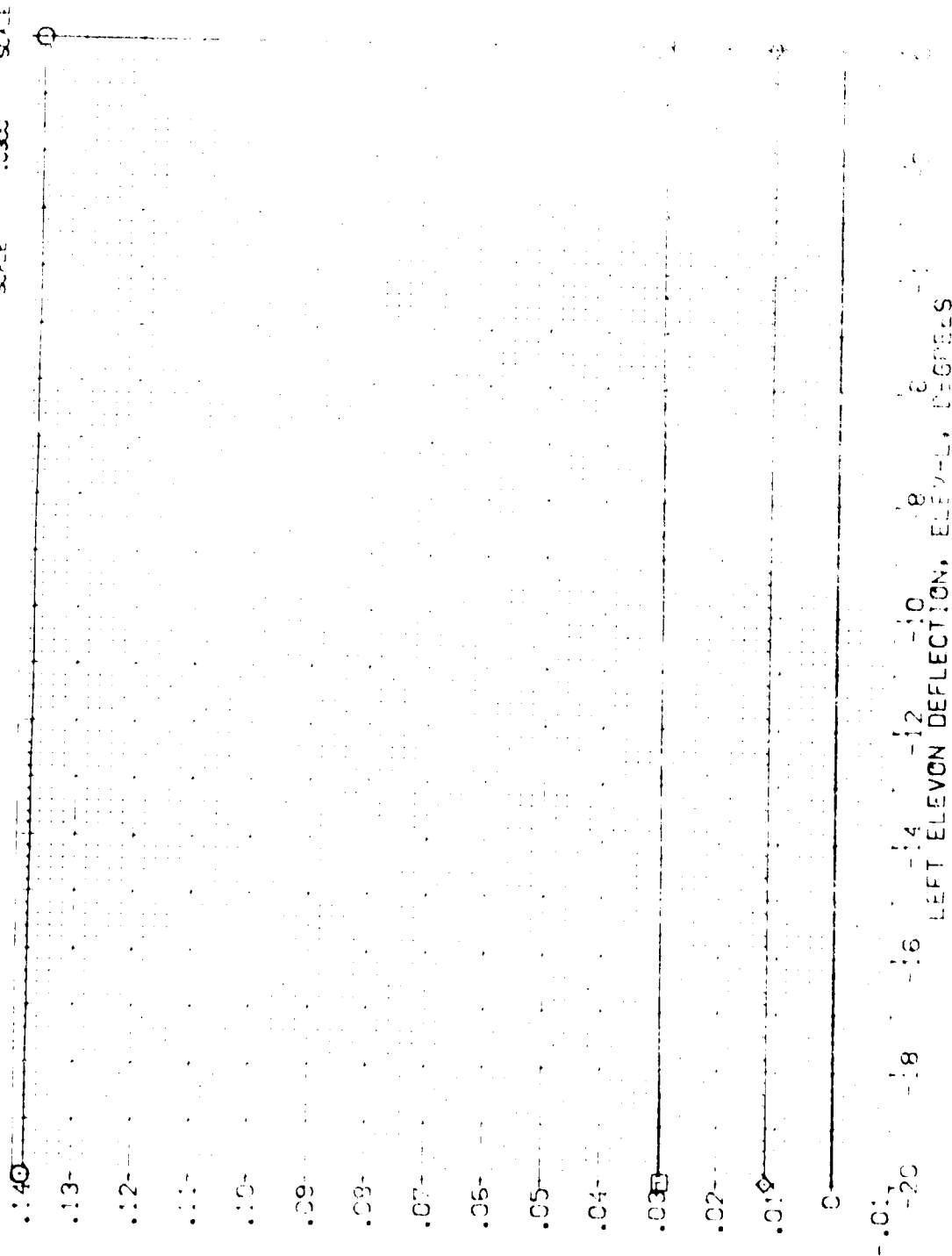


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

ARC 11-747 0A53# B C M F W1 V NCM. RN/L  
(EEJ021)

5-15

PARAMETRIC VALUES

10.000  
20.000  
30.000

DATE

52

1

1.200  
0.000  
0.000

888

38 11 65

TA

1

105

• • •

33  
DA

1021  
TASE

1

1373  
1374

1000

U

33  
DA

NO: 9  
35 V 1

1

-20-  
ELEV

7-100

35, 36, 37

[illegible]

REF

2.4.2.

1100  
1101  
1102

with

85

6.



OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>H</sub>EQ

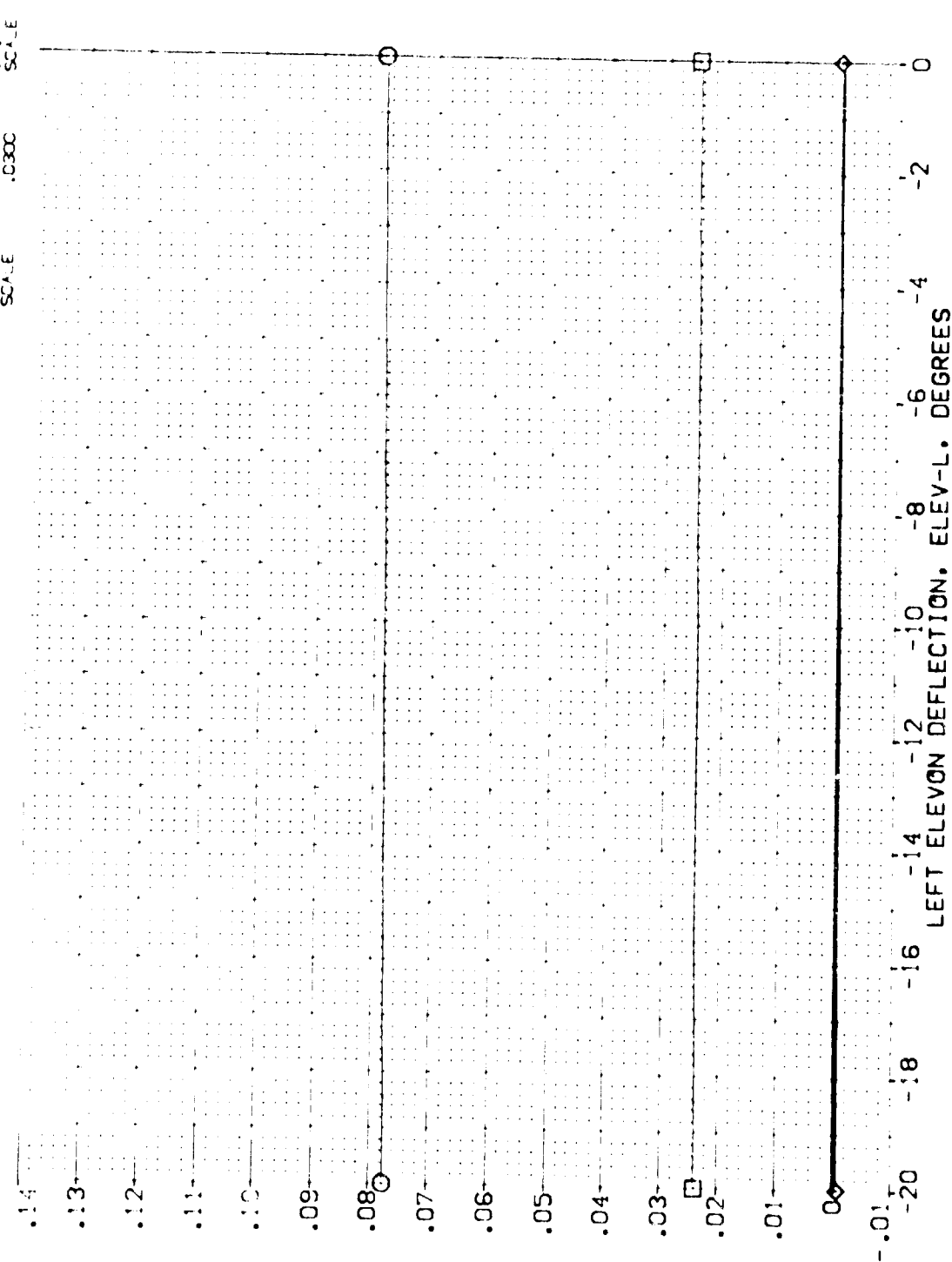
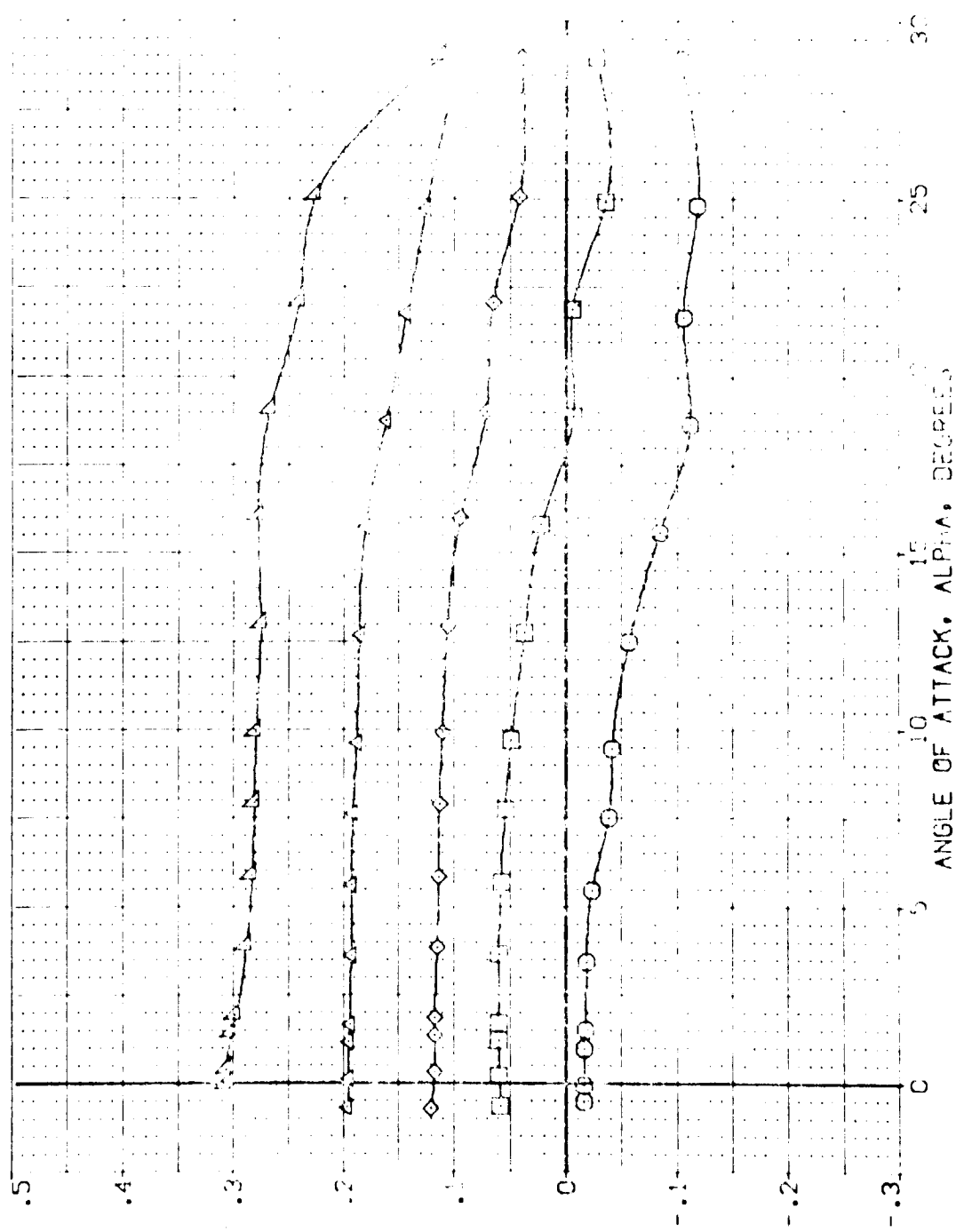


FIG. 45 AILERON INTERACTIONS, RIGHT ELEVON=-20 DEGREES

INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

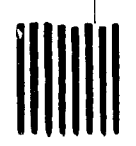
DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOLAP	SPEED	REFERENCE INFORMATION
(YE4003)	ARC 11-747 DA53A B C M F V I V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(YE4011)	ARC 11-747 DA53A B C M F V I V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YE4002)	ARC 11-747 DA53A B C M F V I V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
(YE4019)	ARC 11-747 DA53A B C M F V I V	-20.000	.000	-11.700	25.000	XMREF 32.3010 IN.
(YE4023)	ARC 11-747 DA53A B C M F V I V	-40.000	.000	-11.700	25.000	YMREF 11.2500 IN.
						SCALE .0000



ANGLE OF ATTACK, ALPHA, DEGREES

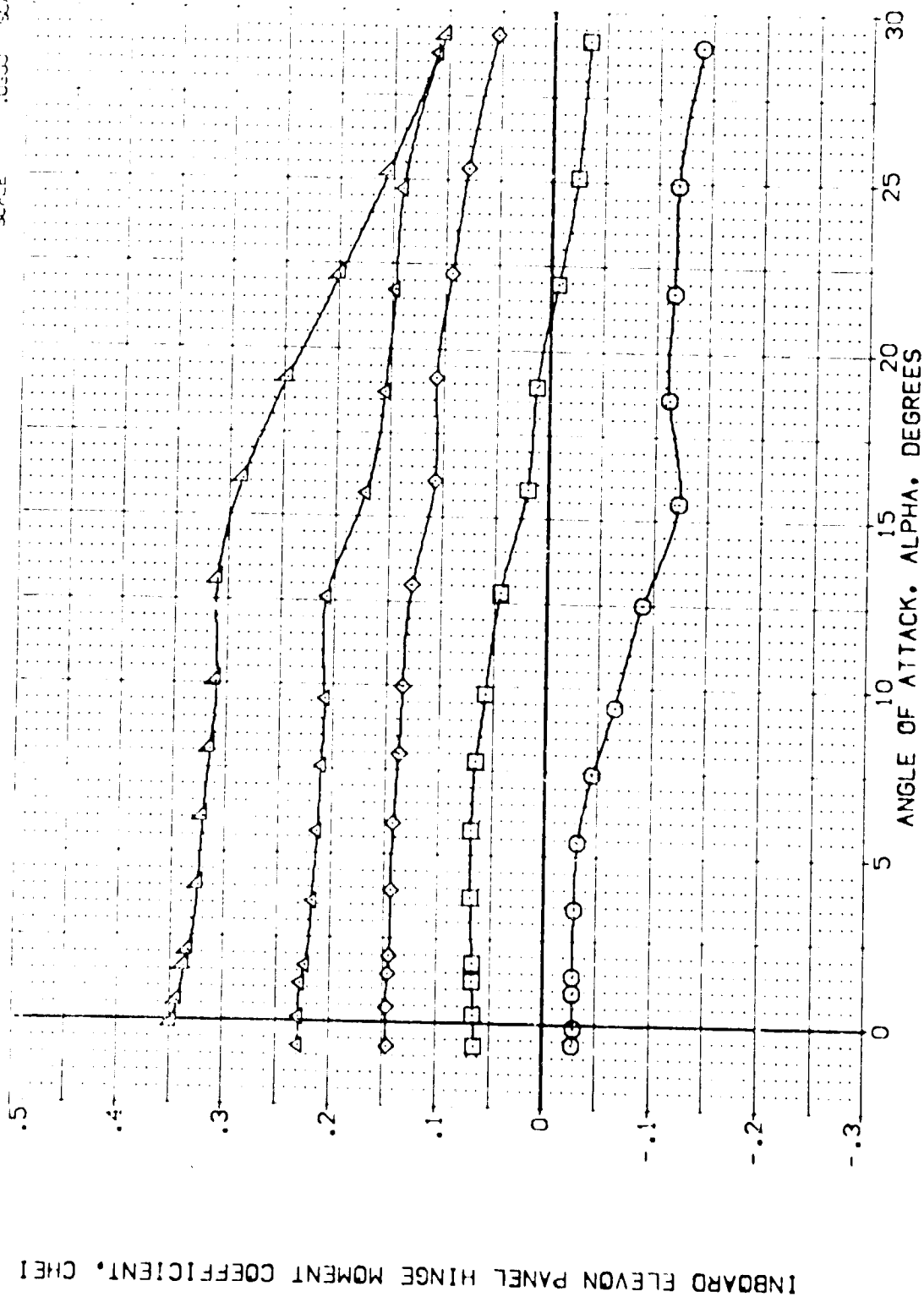
FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

CAMACH = .60





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDGRK	REFERENCE INFORMATION
(V) 0031	ARC 1-747 C-53A B C M F V	15.000	.000	1.700	25.000	SPKE 2.4210
(V) 0032	ARC 1-747 C-53A B C M F V	10.000	.000	1.700	25.000	LOKE 14.2440
(V) 0033	ARC 1-747 C-53A B C M F V	-10.000	.000	1.700	25.000	BOKE 20.1004
(V) 0034	ARC 1-747 C-53A B C M F V	-20.000	.000	1.700	25.000	AMKE 32.0000
(V) 0035	ARC 1-747 C-53A B C M F V	-40.000	.000	1.700	25.000	VMKE 11.2000
						SCALE 11.0000
						SCALE 11.0000

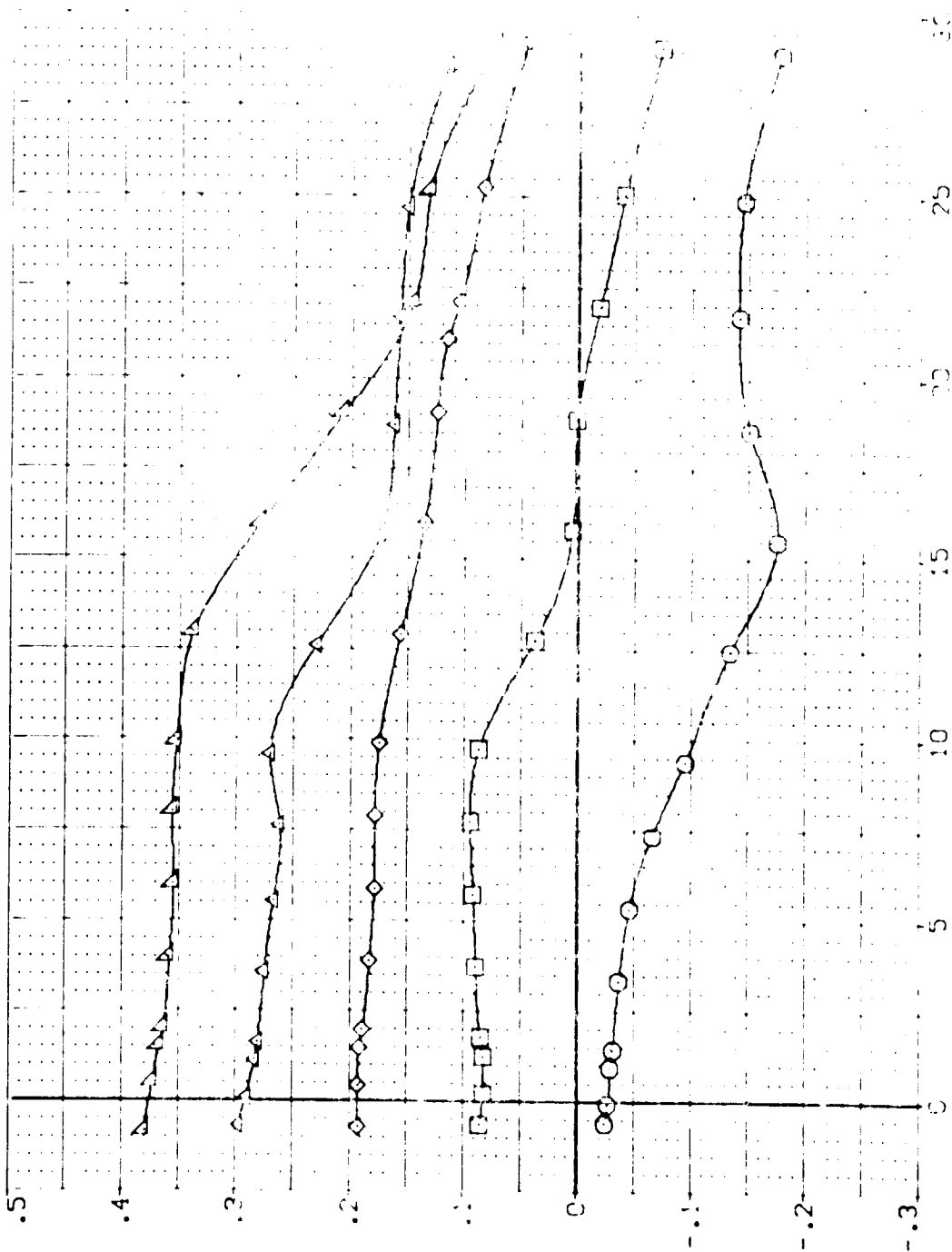


INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON.	RV/L	ELEVON	AIL/RON	BOF/LAP	SPDRBK	REFERENCE INFORMATION
(VEJ003)	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	15.000	.000	-11.700	SPDRBK	2.4210 SQ. FT.
(VEJ011)	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	.000	.000	-11.700	LOEF	14.2440 IN.
(VEJ002)	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	-10.000	.000	-11.700	BOEF	28.1034 IN.
(VEJ019)	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	-20.000	.000	-11.700	XMRP	32.3010 IN.
(VEJ023)	ARC 11-747 DA53A B C H F VI V	NON.	RV/L	-40.000	.000	-11.700	YMRP	11.2530 IN.
							SCALE	.0330

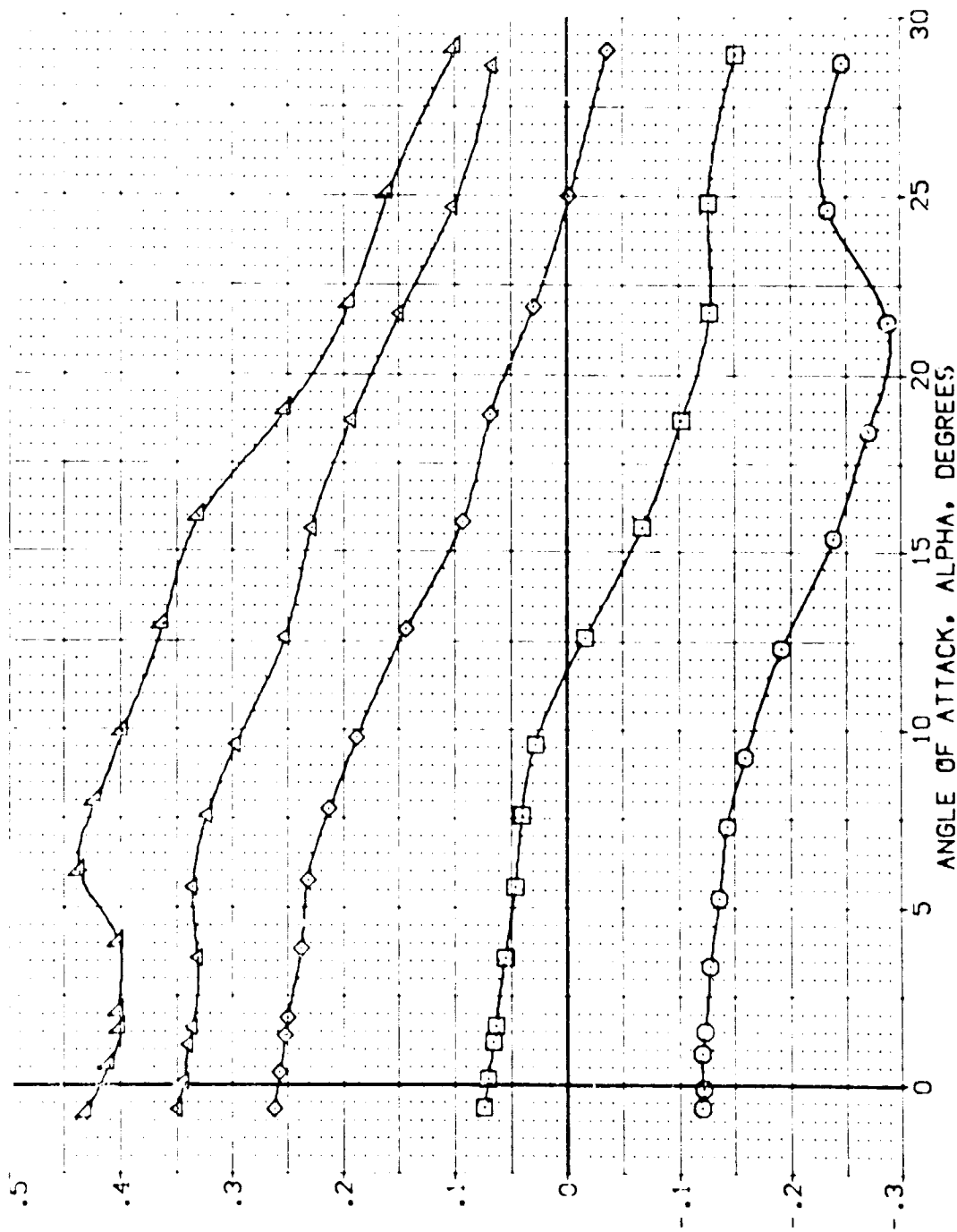


INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOILER	REFERENCE INFORMATION
(V6.003)	ARC 11-747 BA53A B C H F V	15.000	.000	-11.700	25.000	SREF 2.4210
(V6.003)	ARC 11-747 BA53A B C H F V	.000	.000	-11.700	25.000	LRREF 14.2400
(V6.003)	ARC 11-747 BA53A B C H F V	-10.000	.000	-11.700	25.000	DRREF 28.1004
(V6.003)	ARC 11-747 BA53A B C H F V	-20.000	.000	-11.700	25.000	YREF 32.0000
(V6.003)	ARC 11-747 BA53A B C H F V	-40.000	.000	-11.700	25.000	ZREF 11.2000
						SCALE



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, CHEI

FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

(M)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(YE2003)	ARC 11-747 DA53A B C M F V V	15.000	.000	11.700	25.000	SRF 2.4210
(YE2001)	ARC 11-747 DA53A B C M F V V	15.000	.000	11.700	25.000	LMF 14.2440
(YE2002)	ARC 11-747 DA53A B C M F V V	-10.000	.000	11.700	25.000	LMF 23.1004
(YE2019)	ARC 11-747 DA53A B C M F V V	-20.000	.000	11.700	25.000	LMF 22.3010
(YE2023)	ARC 11-747 DA53A B C M F V V	-40.000	.000	11.700	25.000	LMF 11.0000
						SCALE 11.0000
						SCALE 11.0000

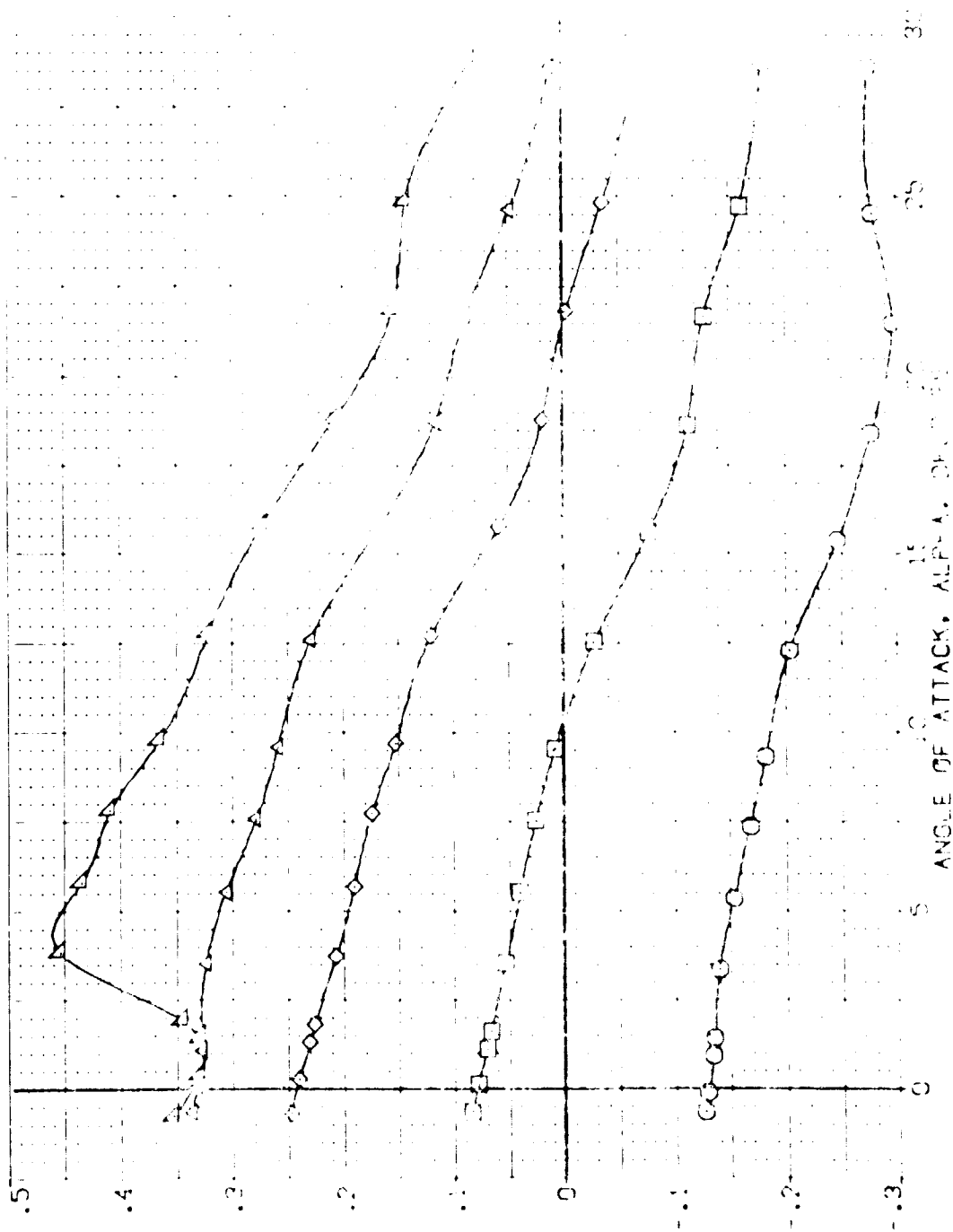


FIG. 46 ELEVON PANEL HINGE MOMENT'S VERSUS ANGLE OF ATTACK

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	NOT.	RU/L	ELEVON	AIRLON	BOFLAP	SPORRK	REFERENCE INFORMATION
(VE-003)	ARC 11-747	CA53A B C M E V	V	RU/L	15.000	.000	-11.700	25.000	SRP 2.4210 50. FT.
(VE-011)	ARC 11-747	CA53A B C M E V	V	RU/L	10.000	.000	-11.700	25.000	LRP 14.2440 IN.
(VE-002)	ARC 11-747	CA53A B C M E V	V	RU/L	-10.000	.000	-11.700	25.000	EXP 28.1004 IN.
(VE-019)	ARC 11-747	CA53A B C M E V	V	RU/L	-20.000	.000	-11.700	25.000	YMP 32.0010 IN.
(VE-023)	ARC 11-747	CA53A B C M E V	V	RU/L	-40.000	.000	-11.700	25.000	ZMP 0.000 IN.
									SCALE 11.700 IN.

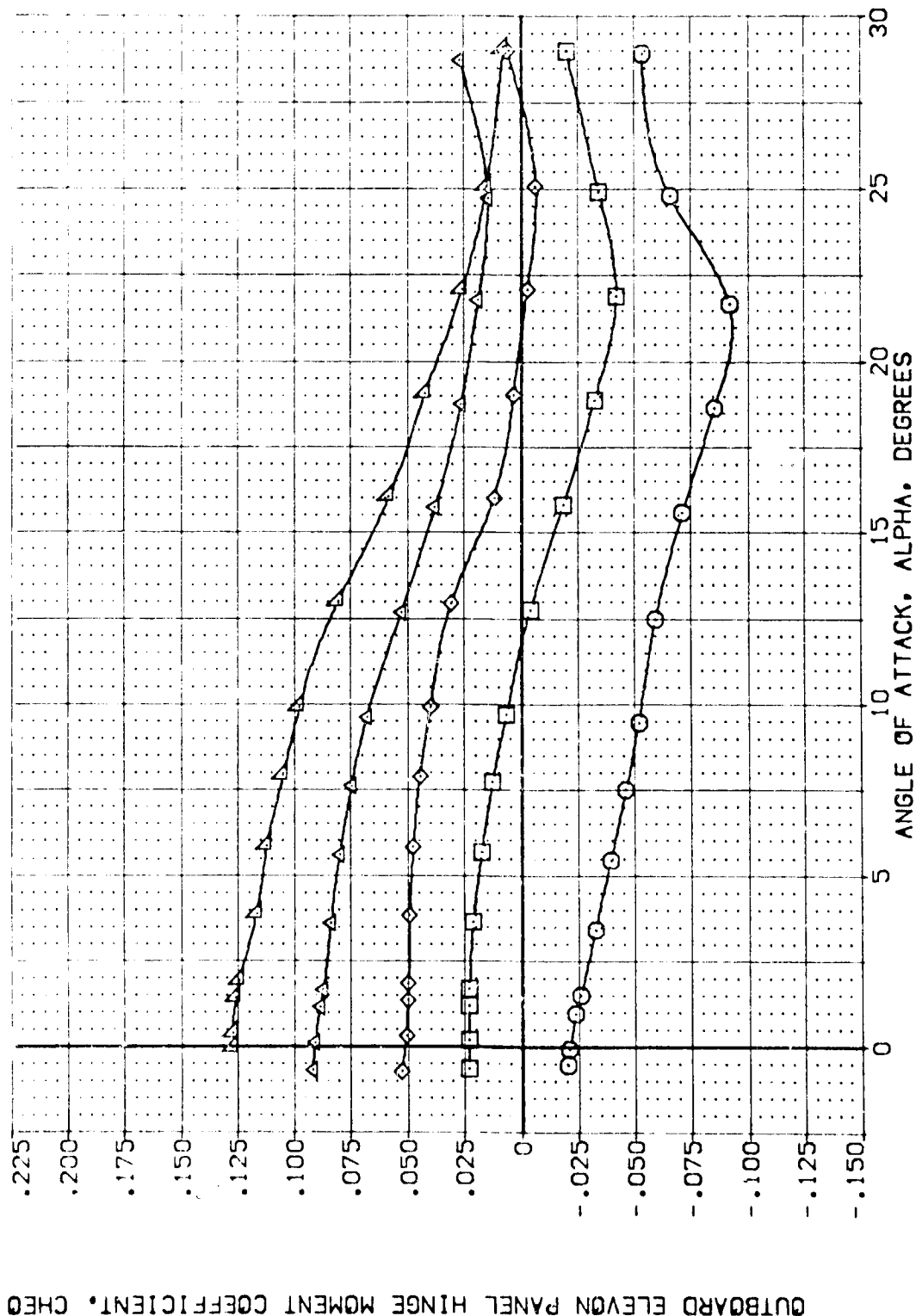


FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

CA/MACH = .60

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ELEVON    AILERON    BOFLAP    SPOBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YE1003]	ARC 11-747 BA53A B C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 S2.FT.
[YE1011]	ARC 11-747 BA53A B C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YE1002]	ARC 11-747 BA53A B C M F VI V	-10.000	.000	-11.700	25.000	BREF 28.1001 IN.
[YE1019]	ARC 11-747 BA53A B C M F VI V	-20.000	.000	-11.700	25.000	XMRP 32.3010 IN.
[YE1023]	ARC 11-747 BA53A B C M F VI V	-40.000	.000	-11.700	25.000	YMRP .0000 IN.
						ZMRP 11.2503 IN.
						SCALE .0300

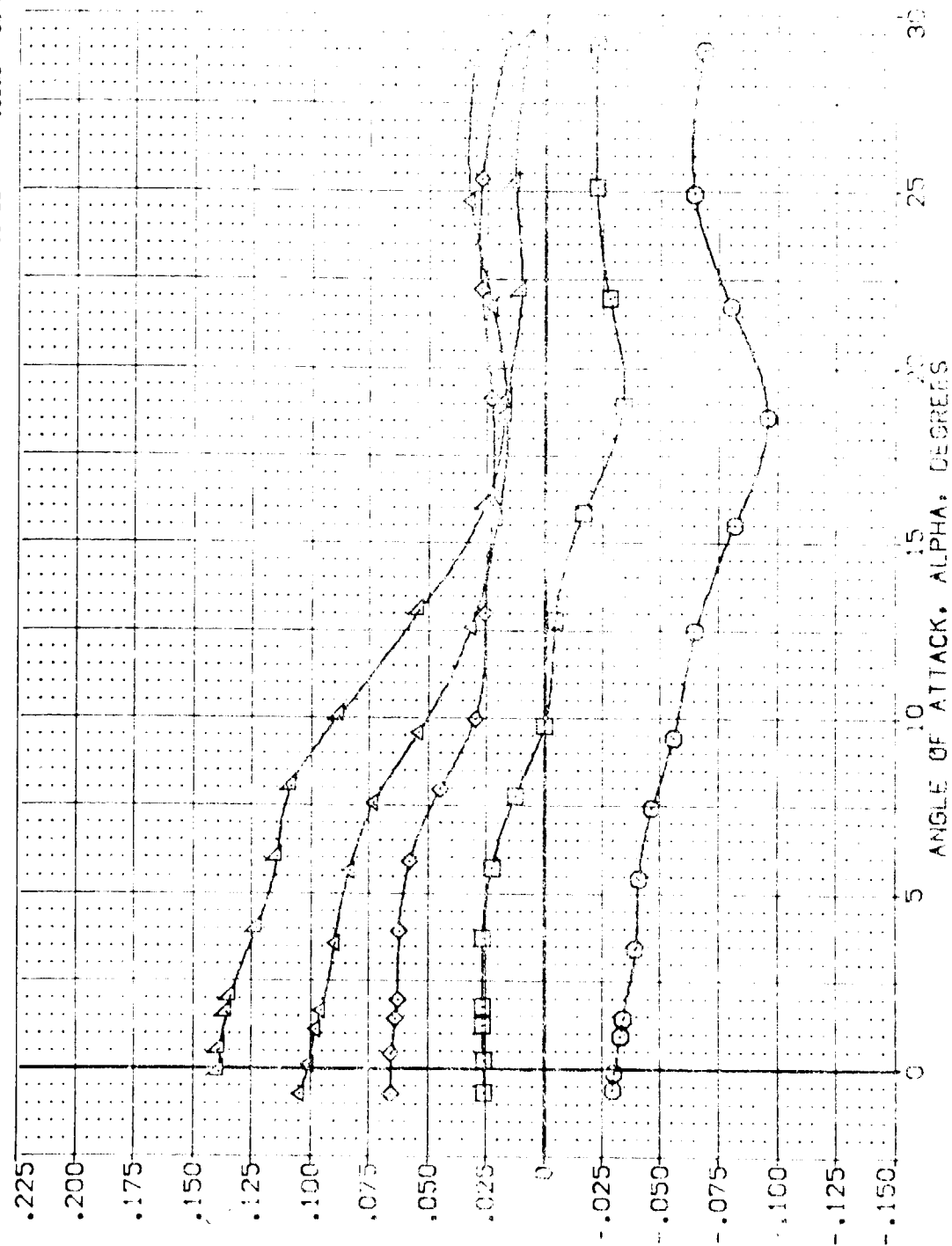


FIG. 46 ELEVON PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK

(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AIRLON	BOFLAP	SPDRBK	REFERENCE INFORMATION
(YE-003)	ARC 11-747 CAS3A 8 C M F VI V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE-011)	ARC 11-747 CAS3A 8 C M F VI V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YE-020)	ARC 11-747 CAS3A 8 C M F VI V	-10.000	.000	-11.700	25.000	CREF 28.1601 IN.
(YE-030)	ARC 11-747 CAS3A 8 C M F VI V	-20.000	.000	-11.700	25.000	XREF 32.5010 IN.
(YE-023)	ARC 11-747 CAS3A 8 C M F VI V	-40.000	.000	-11.700	25.000	YREF .0000 IN.
						ZREF .0000 IN.
						SCALE .0005

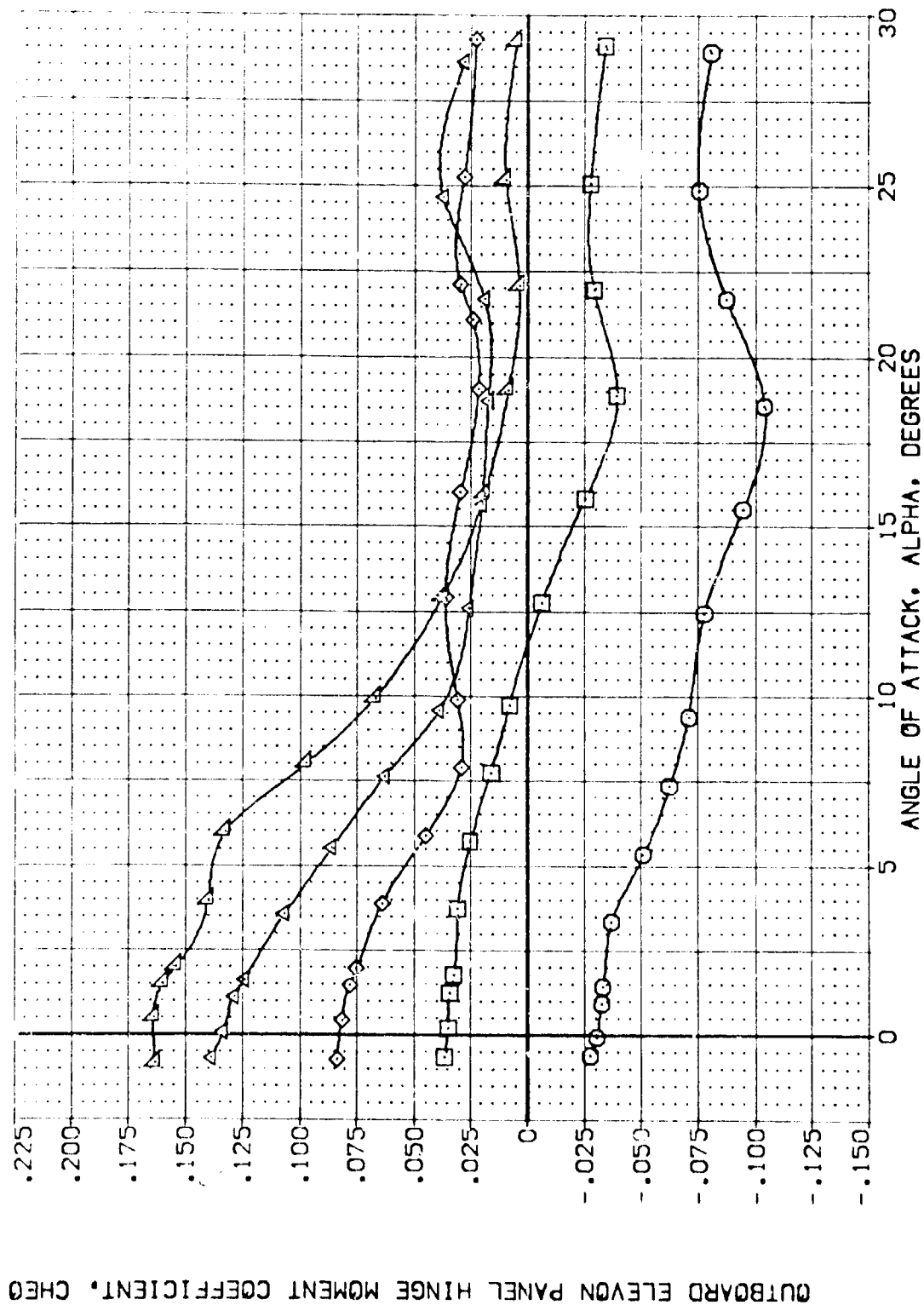


FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

(C)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ELEVON	AILERON	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YE1003]	ARC 11-747 C453A B C M F V1 V	15.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YE1011]	ARC 11-747 C453A B C M F V1 V	.000	.000	-11.700	25.000	LREF 14.2440 IN.
[YE1002]	ARC 11-747 C453A B C M F V1 V	-10.000	.000	-11.700	25.000	BREF 28.1004 IN.
[YE1019]	ARC 11-747 C453A B C M F V1 V	-20.000	.000	-11.700	25.000	WREF 32.3010 IN.
[YE1023]	ARC 11-747 C453A B C M F V1 V	-40.000	.000	-11.700	25.000	WREF 32.3010 IN.
						SCALE .0000

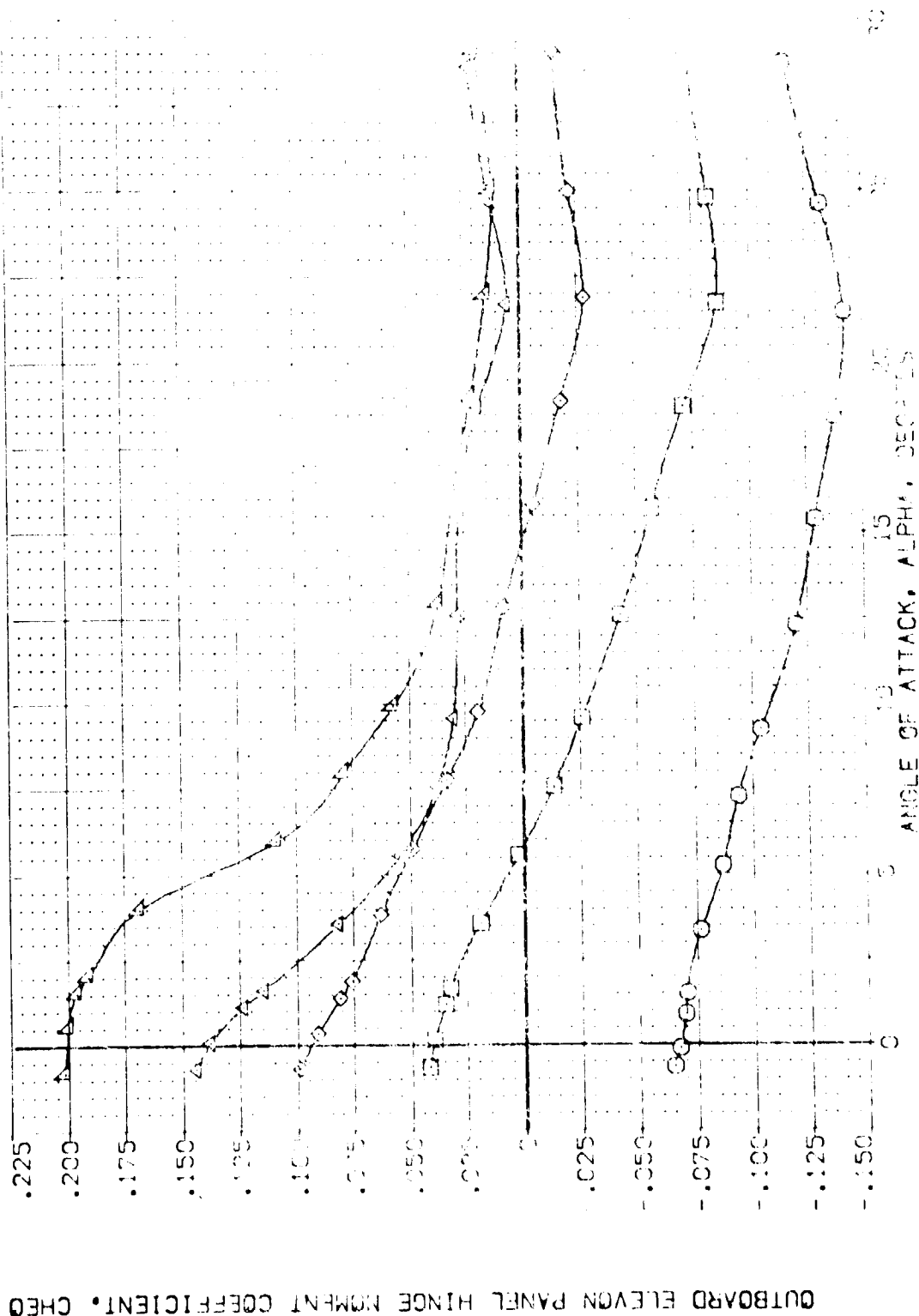


FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	NON-PAUL	ELEVON	AILERON	BOFLAP	SPDBRK	REFERENCE INFORMATION
YE1003	APC 11-747 C-53A B C M F V	V	15.000	.000	-11.700	25.000	SX F 2.4210 SQ.F.T.
YE1011	APC 11-747 C-53A B C M F V	V	10.000	.000	-11.700	25.000	LOEF 14.2410
YE1002	APC 11-747 C-53A B C M F V	V	-10.000	.000	-11.700	25.000	RY F 28.1004
YE1019	APC 11-747 C-53A B C M F V	V	-20.000	.000	-11.700	25.000	RY F 32.3510
YE1023	APC 11-747 C-53A B C M F V	V	-40.000	.000	-11.700	25.000	RY F 37.10
							ZN F 11.2510
							SCALE .0000

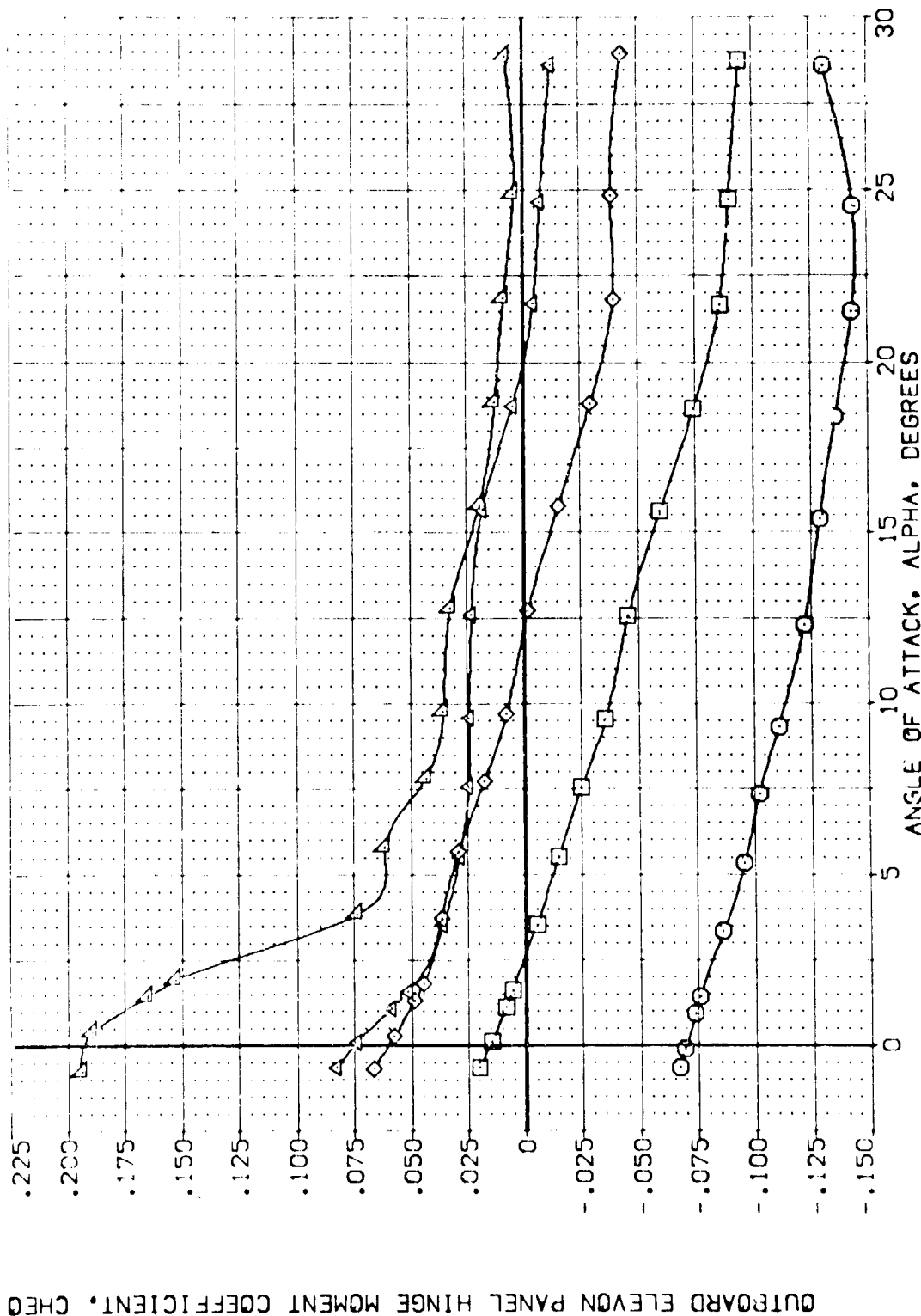


FIG. 46 ELEVON PANEL HINGEMENTS VERSUS ANGLE OF ATTACK

(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (VEJ012) ARC 11-747 DAS3A B C M F VI V  
 (VEJ013) ARC 11-747 DAS3A B C M F VI V  
 (VEJ014) ARC 11-747 DAS3A B C M F VI V

ALPHA RUDDER BOFLAP SPEEDBRK  
 .000 .000 -11.700 25.000  
 10.000 .000 -11.700 25.000  
 20.000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XREF 32.3010 IN.  
 YREF 11.2500 IN.  
 ZREF .0300 IN.  
 SCALE

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

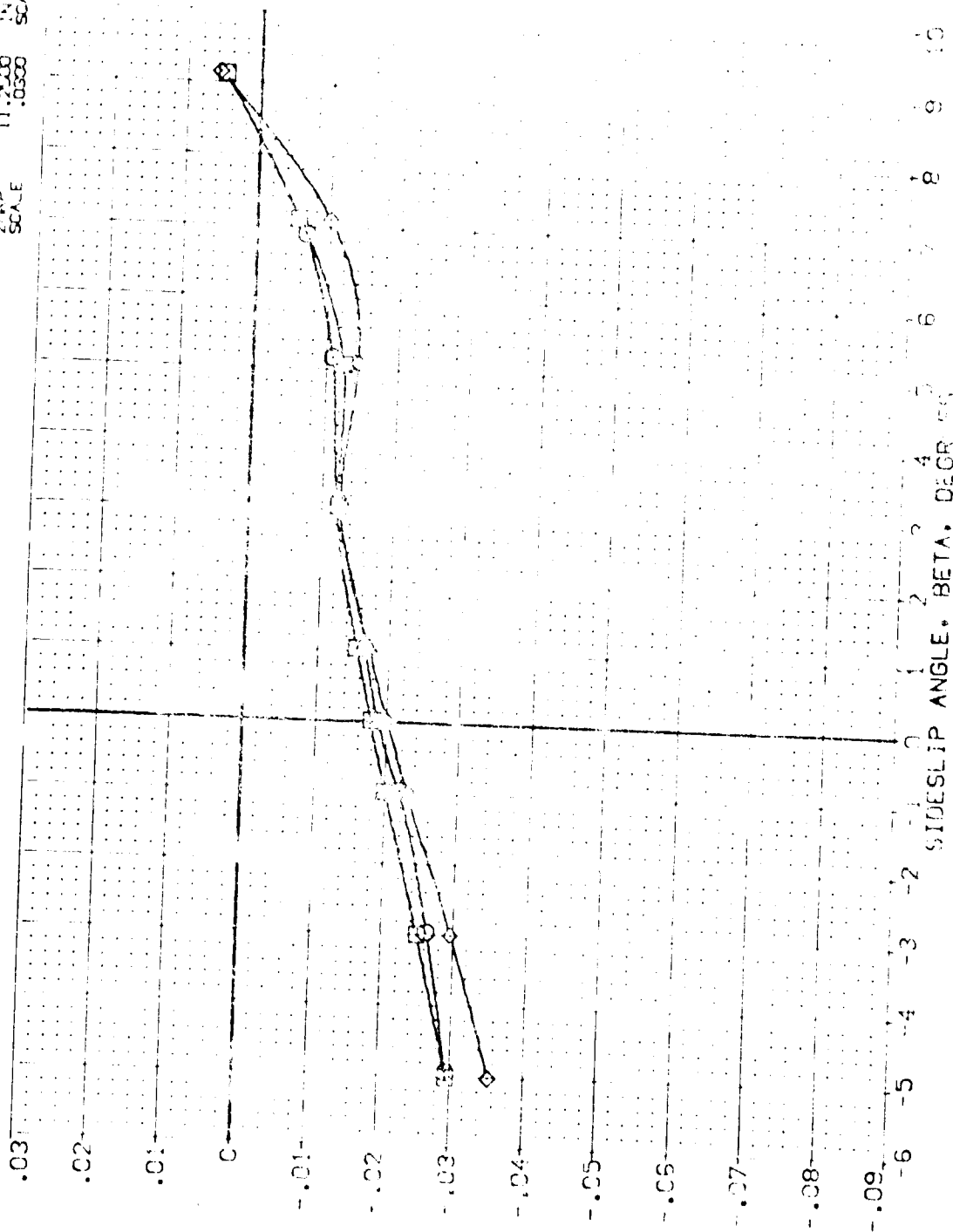


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE - 25 DEG.  
 (A)MACH = .60

DATA SET	SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	SOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(YES:012)	○	ARC 11747 0453A B C M F V	.000	.000	-11.700	75.000	SPKE 2.4210 SQ. FT.
(YES:013)	○	ARC 11747 0453A B C M F V	10.000	.000	-11.700	75.000	LPKF 14.2440
(YES:014)	○	ARC 11747 0453A B C M F V	20.000	.000	-11.700	75.000	EPKF 20.1000
							WTP 32.5000
							WTP 11.2000
							SCALE .0000

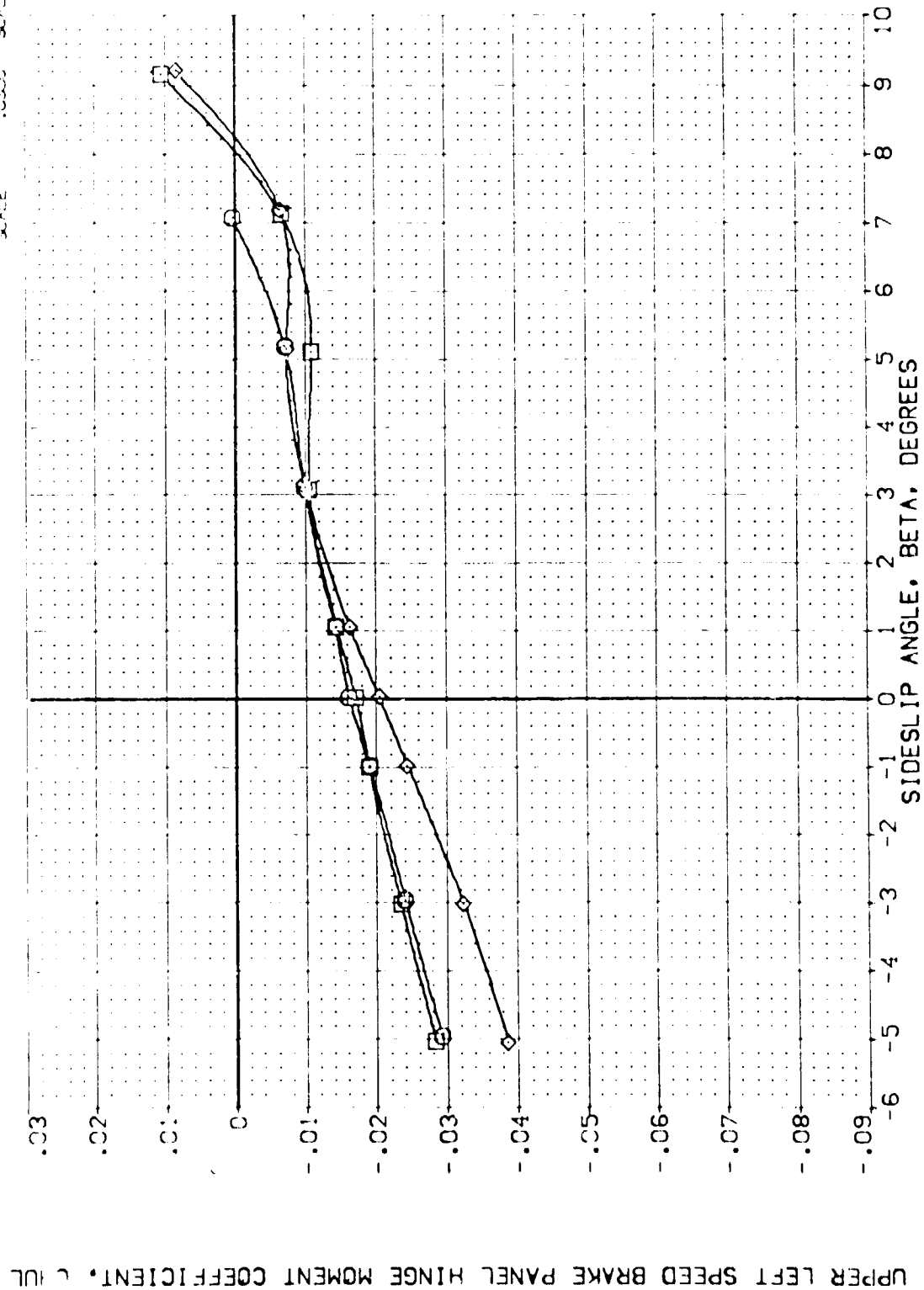


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(B)MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    EOL LAP    SPEED    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	EOL LAP	SPEED	REFERENCE INFORMATION
(YEJ012)	ARC 11-747 0A53A B C M F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJ013)	ARC 11-747 0A53A B C M F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YEJ014)	ARC 11-747 0A53A B C M F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
						YMRP 32.3310 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

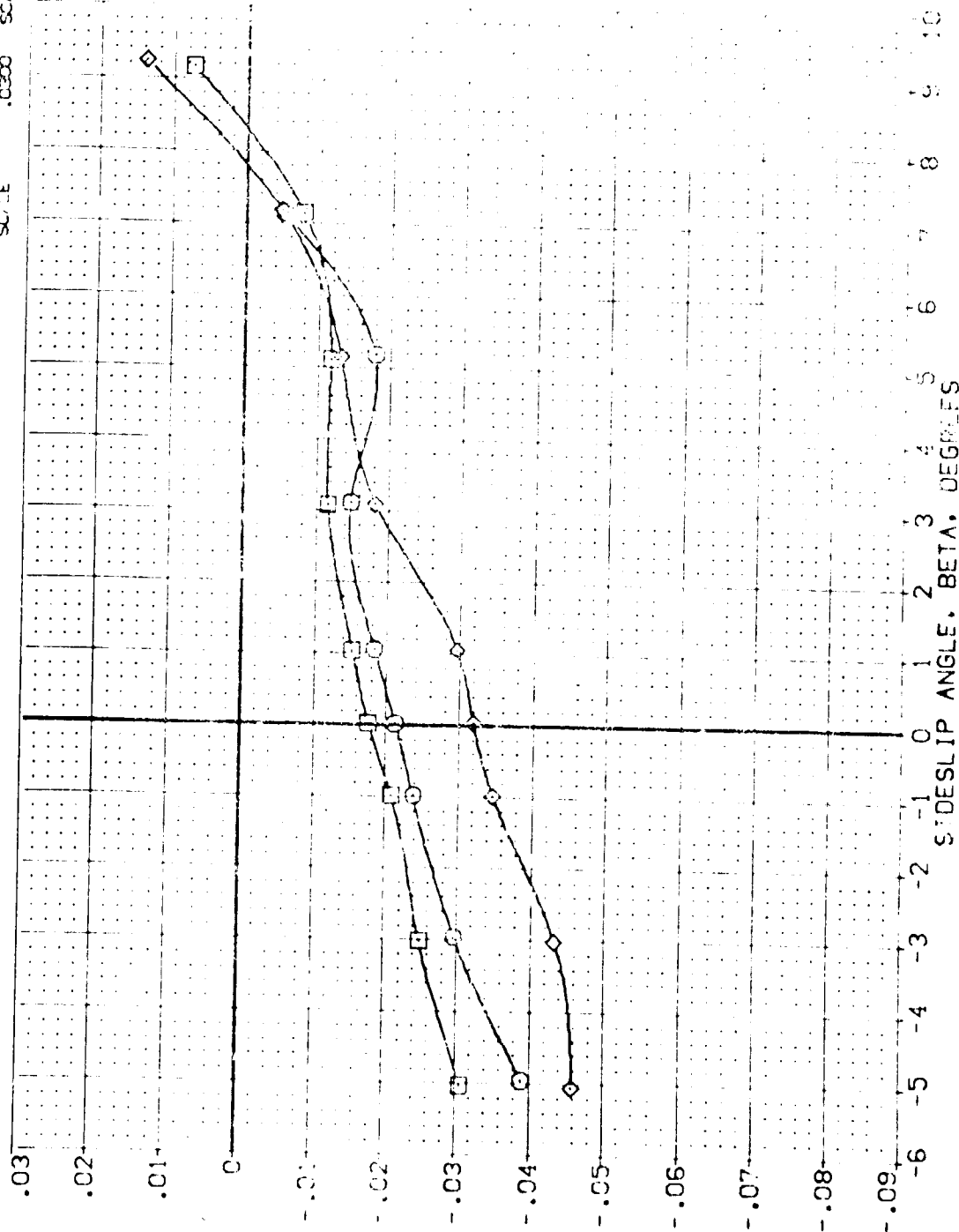


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(C)MACH = .90







DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YE012)	ARC 11-747 GA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(YE013)	ARC 11-747 GA53A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YE014)	ARC 11-747 GA53A B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.5310 IN.
						YREF .0000 IN.
						ZREF 11.2000 IN.
						SCALE .0030

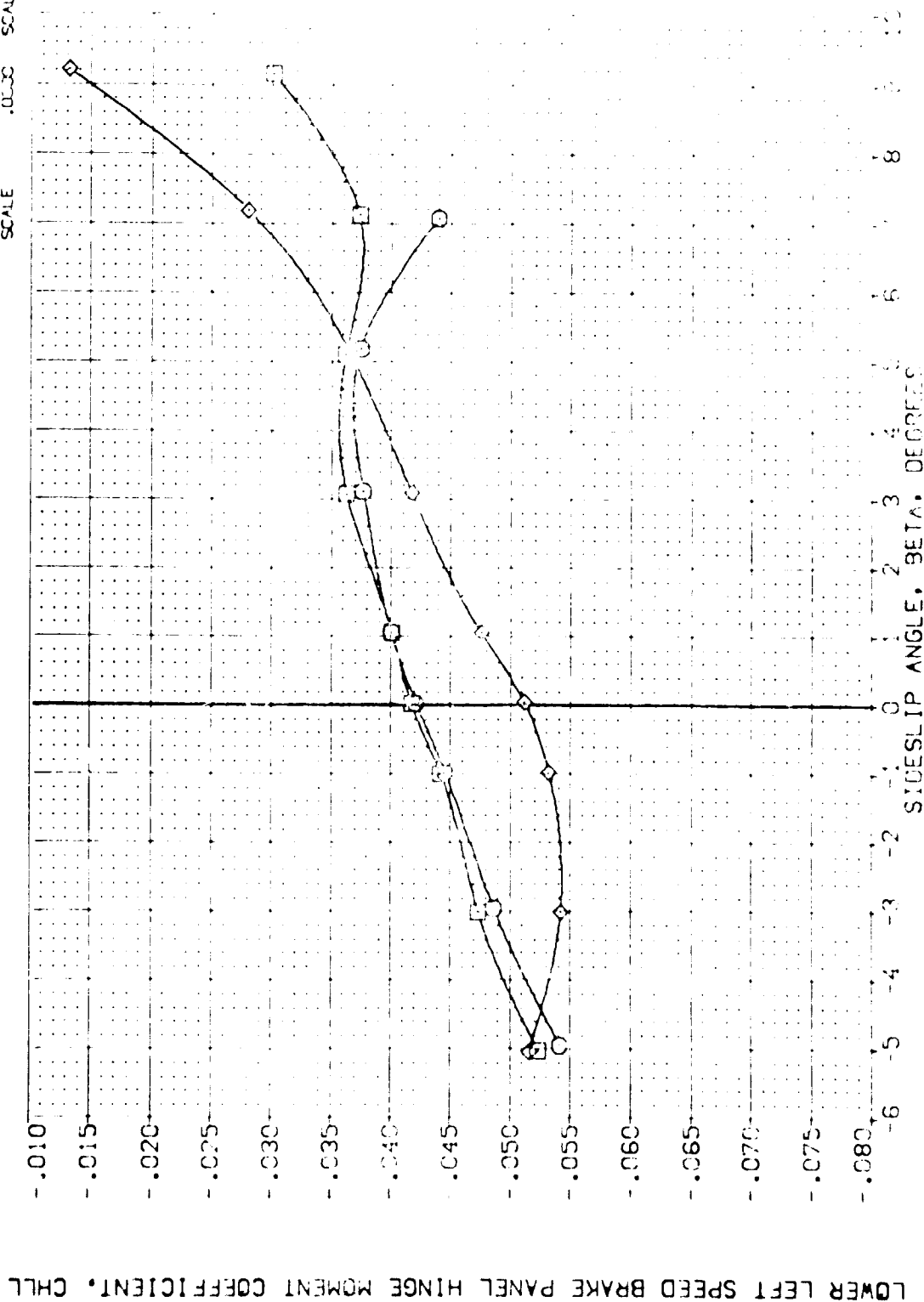


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK SPEEDBRAKE = 25 DEG.

(B)MACH = .80

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOG LAP	SPEED	REFERENCE INFORMATION
(VE0012)	ABC 11-747 2453A B C H F V	.000	.000	-11.700	25.000	2.4210 SQ. FT.
(VE0013)	ABC 11-747 2453A B C H F V	10.000	.000	-11.700	25.000	14.2440
(VE0014)	ABC 11-747 2453A B C H F V	20.000	.000	-11.700	25.000	28.1504
						32.3010
						11.0000
						11.0000
						SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

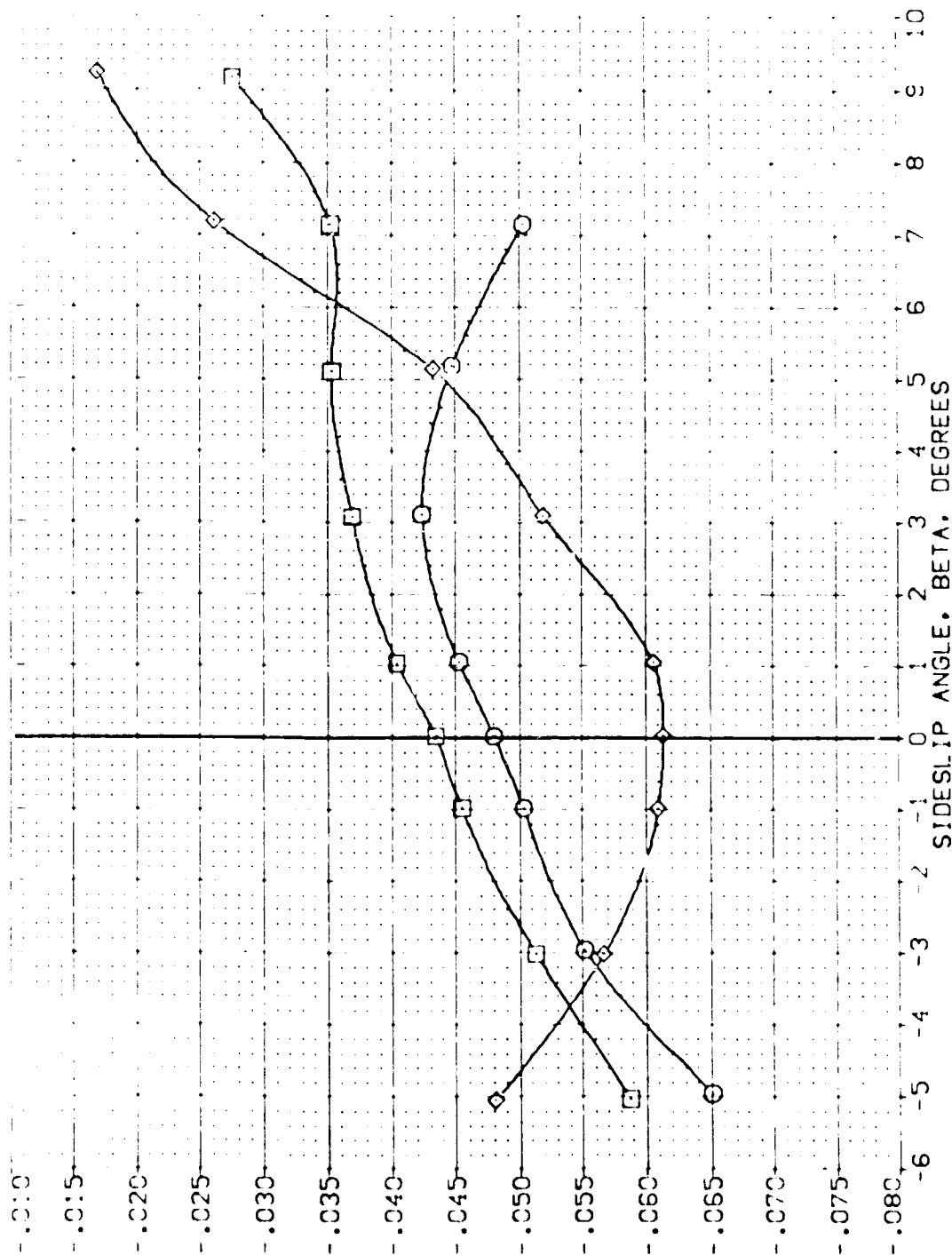


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(C)MAC = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YEL012)	ARC 11-747 GA53A B C H F V V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEL013)	ARC 11-747 GA53A B C H F V V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YEL014)	ARC 11-747 GA53A B C H F V V	20.000	.000	-11.700	25.000	RREF 28.1004 IN.
						XREF 32.2010 IN.
						YREF .0000 IN.
						ZREF 11.2000 IN.
						SCALE .0000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

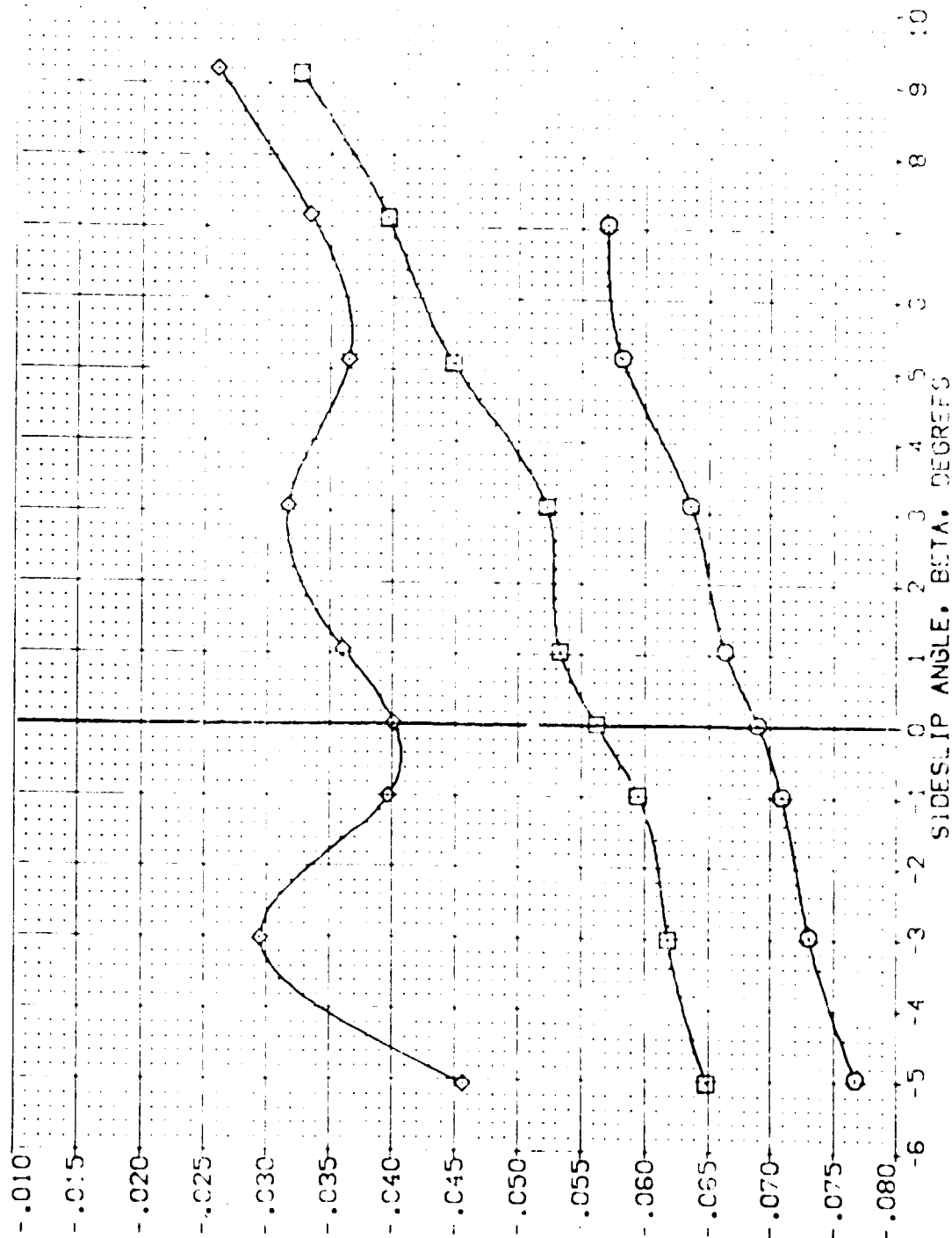


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE 25 DEG.  
(O)MACH 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VE-72)12)	ARC 11-747 QAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(VE-70)13)	ARC 11-747 QAS3A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2410 IN.
(VE-70)14)	ARC 11-747 QAS3A B C H F VI V	20.000	.000	-11.700	25.000	SREF 29.1024 IN.
						XREF 32.0010 IN.
						YREF 11.0000 IN.
						ZREF 11.0000 IN.
						SCALE .0330

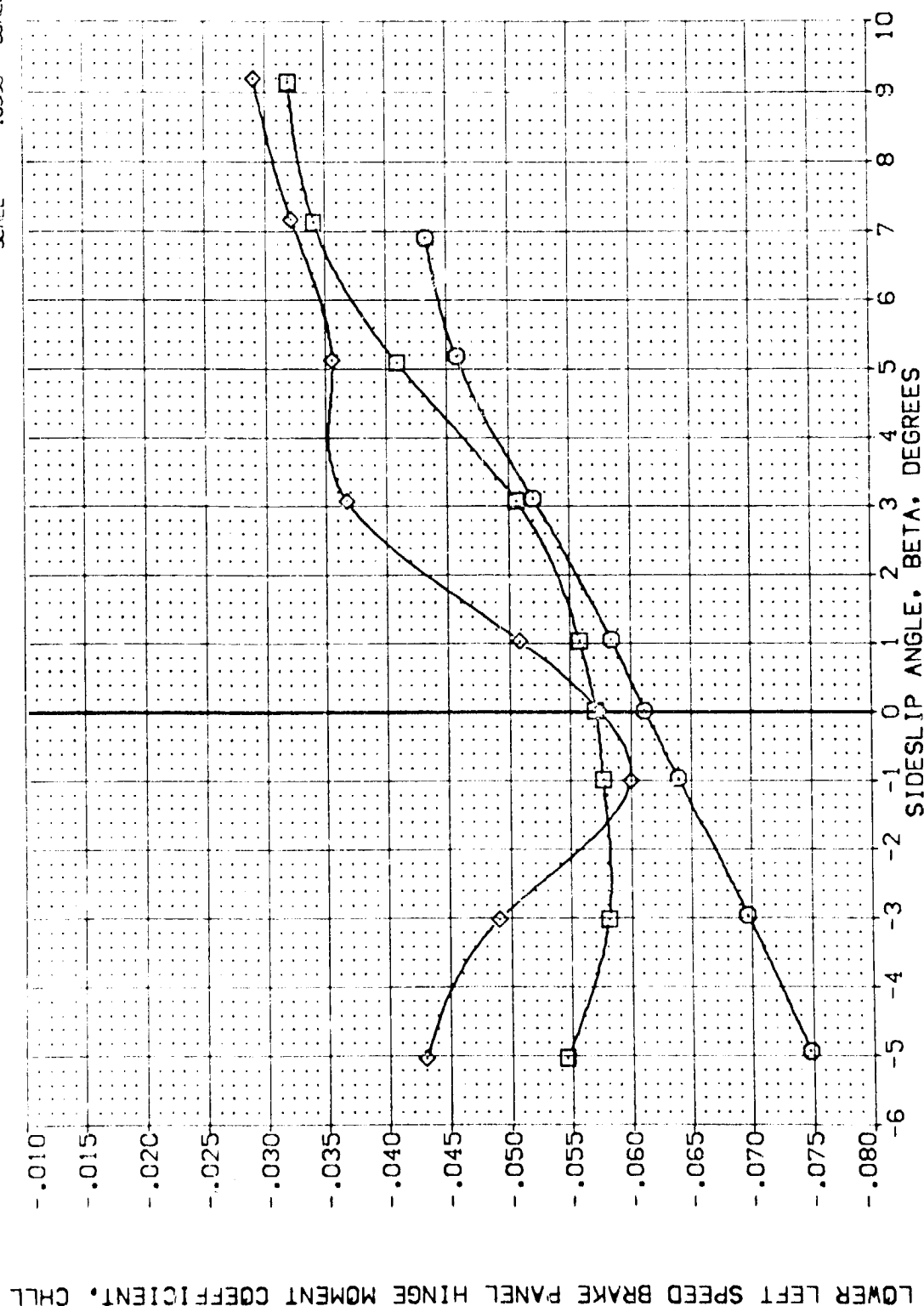


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(E)MACH = 1.20

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BOFLAP    SPOBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(YEJO12)	ARC 11-747 DA53A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJO13)	ARC 11-747 DA53A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.2440 IN.
(YEJO14)	ARC 11-747 DA53A B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XPBP 32.3010 IN.
						YMRP .0030 IN.
						ZMRP 11.2500 IN.
						SCALE .0500

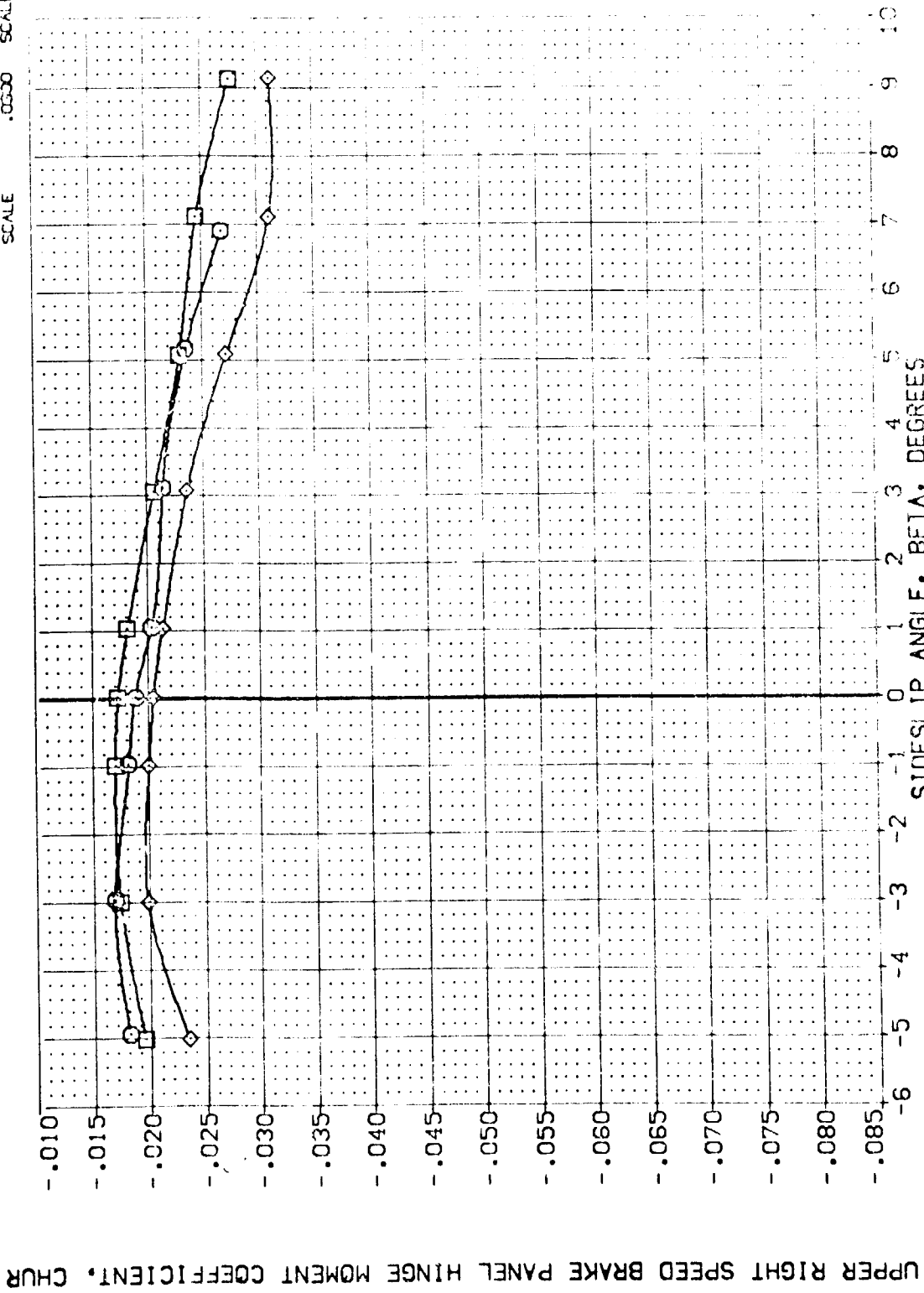


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(M)MACH = .60



UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[YEJ012]	ARC 11-747 CAS3A B C M F V	0.000	0.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[YEJ013]	ARC 11-747 CAS3A B C M F V	10.000	0.000	-11.700	25.000	LREF 14.2440
[YEJ014]	ARC 11-747 CAS3A B C M F V	20.000	0.000	-11.700	25.000	BREF 28.1004
						YREF 32.3010
						ZREF 11.2000
						SCALE 1000

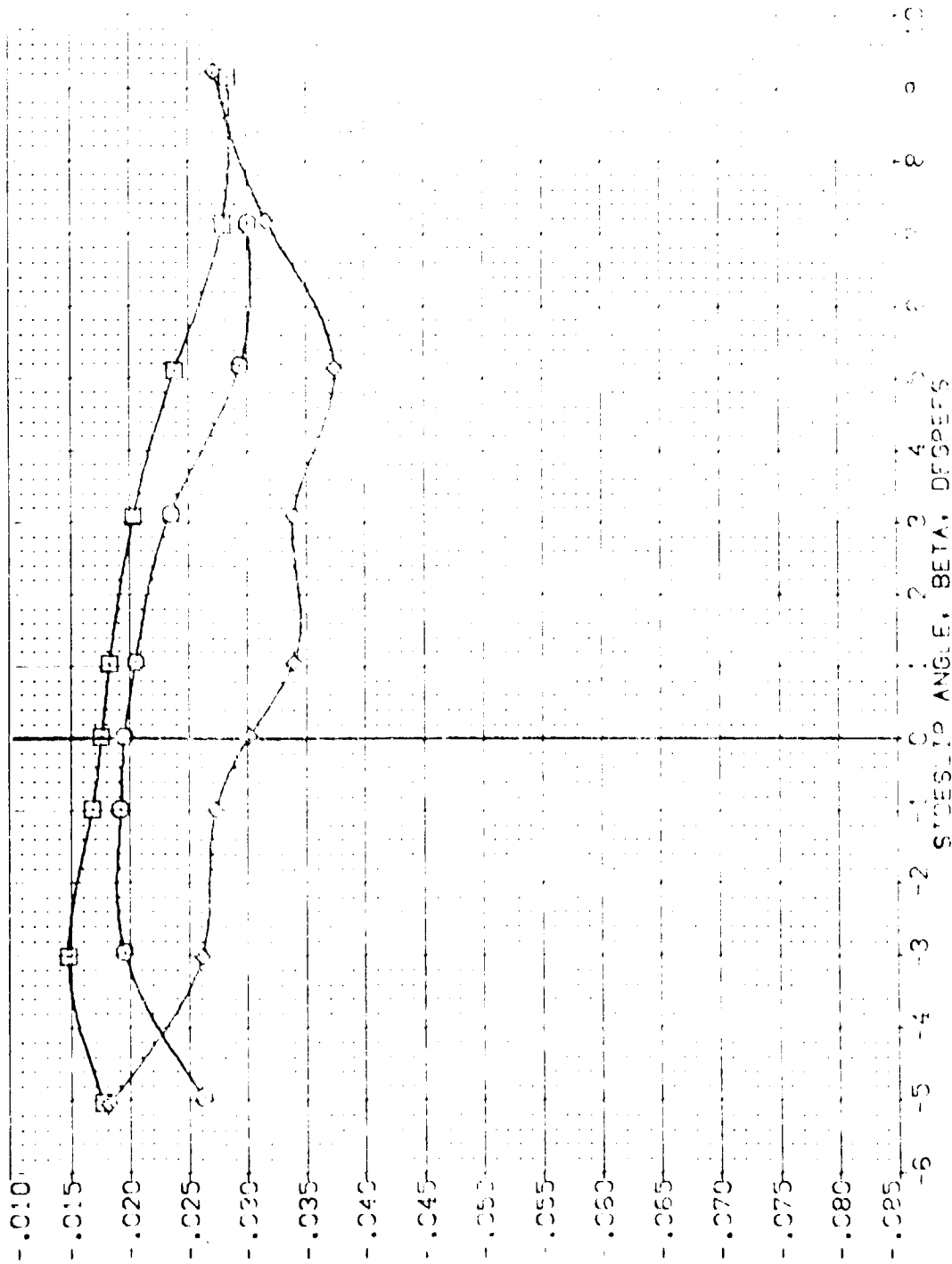


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(C)MAC = .90 PAGE 1002



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	DOFLAP	SPODBRK	REFERENCE INFORMATION
(YES) (2)	ARC 11-747 BA53A B C M F V1 V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YES) (3)	ARC 11-747 BA53A B C M F V1 V	10.000	.000	-11.700	25.000	LREF 14.2440
(YES) (4)	ARC 11-747 BA53A B C M F V1 V	20.000	.000	-11.700	25.000	EREF 20.1004
						YREF 32.1010
						YREF 11.2500
						ZREF 11.2500
						SCALE 1.0000

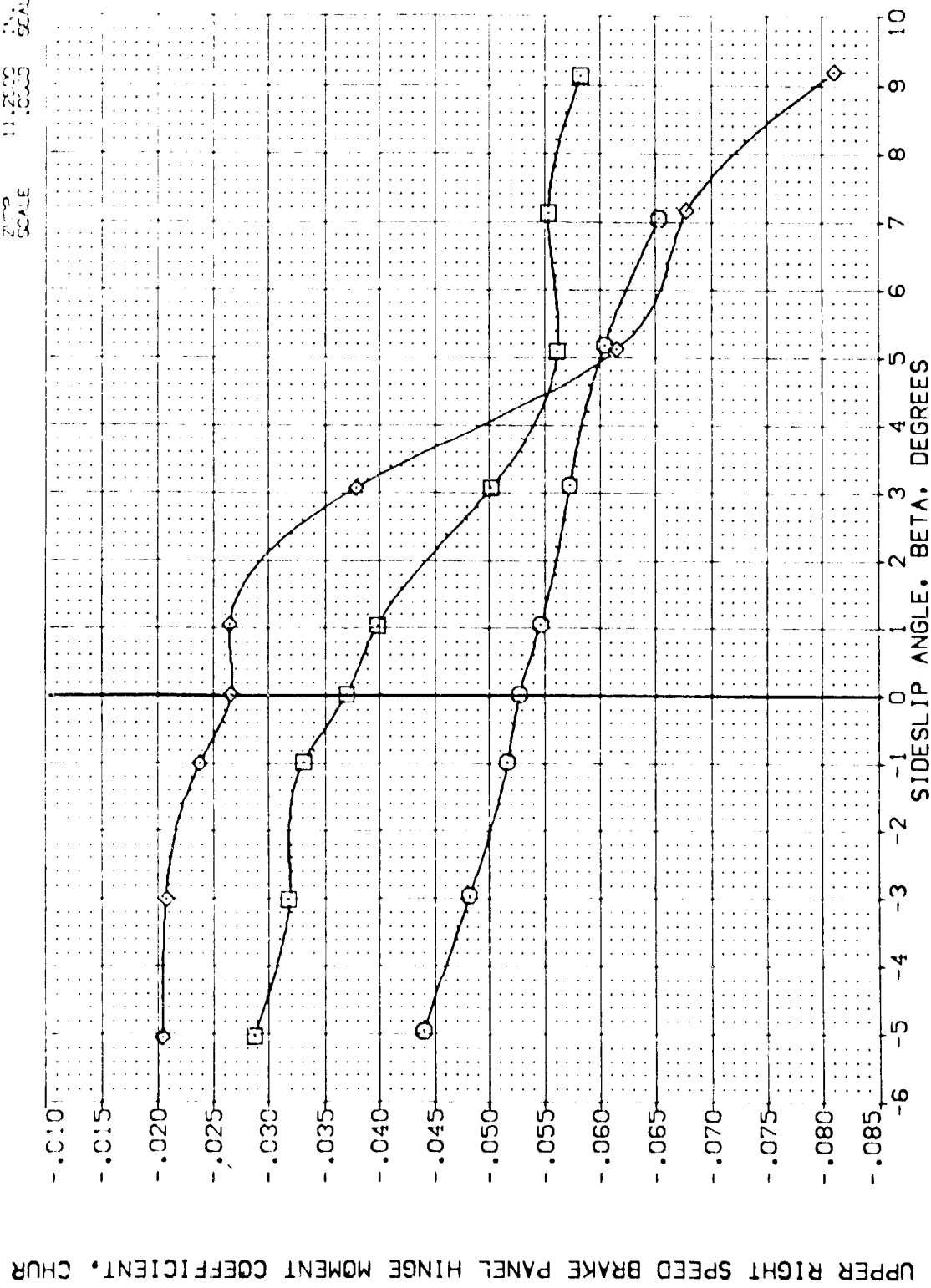


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (C)MACH = 1.05  
 PAGE 1203

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BDF LAP SPEED BRK REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPEED BRK	REFERENCE INFORMATION
{YFJ012}	ARC 11-747 CAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.4210 SQ.FT.
{YFJ013}	ARC 11-747 CAS3A B C H F VI V	10.000	.000	-11.700	25.000	LEEF 14.2440 IN.
{YFJ014}	ARC 11-747 CAS3A B C H F VI V	20.000	.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.5510 IN.
						YREF .0000 IN.
						ZREF 11.7000 IN.
						SCALE .0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

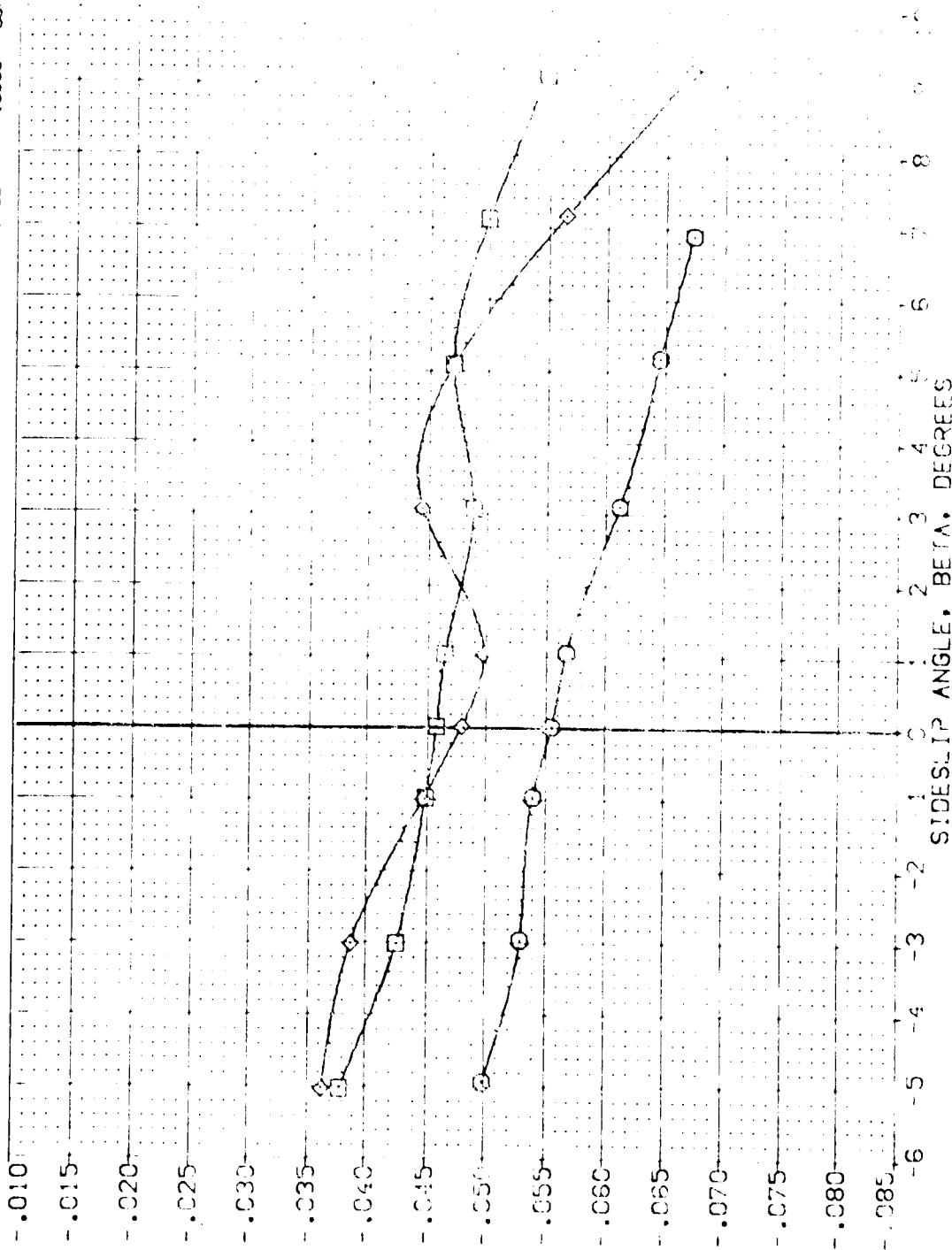


FIG. 47 RUDDER PANEL HINGEMENT'S VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(CD)MACH = 1.20

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DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (YEJ012) ARC 11-747 0A53A B C M F V1 V NOM: RVL  
 (YEJ013) ARC 11-747 0A53A B C M F V1 V NOM: RVL  
 (YEJ014) ARC 11-747 0A53A B C M F V1 V NOM: RVL

ALPHA RUDDER BOFLAP SPEEDRY  
 .000 .000 .000 25.000  
 10.000 .000 -11.700 25.000  
 20.000 .000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 0.000 IN.  
 ZMRP 11.2000 IN.  
 SCALE 0.000 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

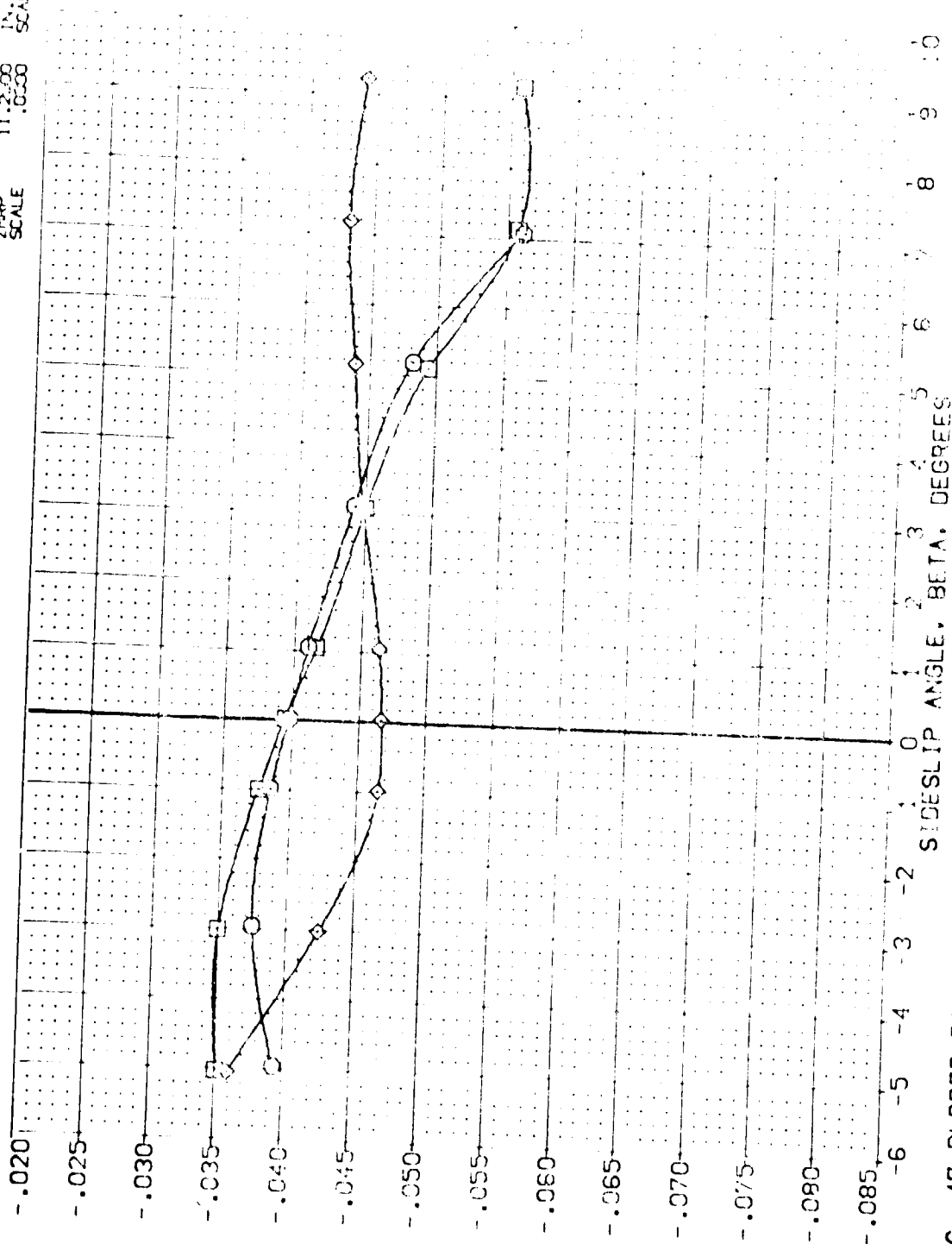


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (B)MAC = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    SPODBRK    REFERENCE INFORMATION

(VEJ012)	ARC 11-747 0A53A B C M F V	.000	.000	25.000	SPEED	2.4210	SCALE
(VEJ013)	ARC 11-747 0A53A B C M F V	10.000	.000	25.000	REF	14.2440	
(VEJ014)	ARC 11-747 0A53A B C M F V	20.000	.000	25.000	SCALE	20.1564	
					ANAL	32.3000	
					ANAL	0.0000	
					ANAL	11.2000	SCALE
					SCALE	11.0000	

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

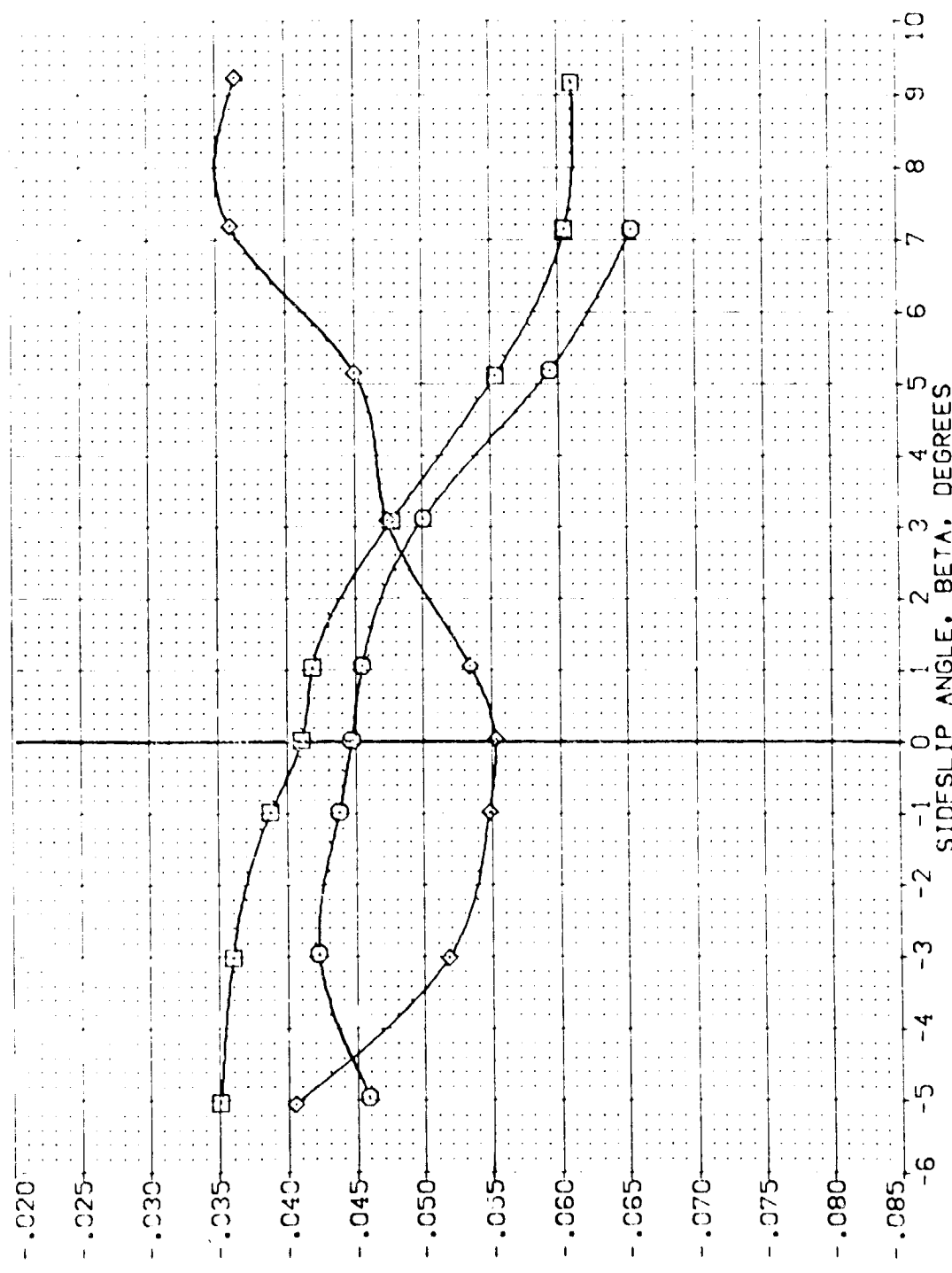


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(C)MACH = .90

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDK	REFERENCE INFORMATION
(VEJ012)	ARC 11-747 SAS3A B C H F VI V	.000	.000	-11.700	25.000	SREF 2.421C
(VEJ013)	ARC 11-747 SAS3A B C H F VI V	10.000	.000	-11.700	25.000	LREF 14.244C
(VEJ014)	ARC 11-747 SAS3A B C H F VI V	20.000	.000	-11.700	25.000	DRF 28.1004
						YREF 32.201C
						ZREF .000C
						YREF 11.200C
						ZREF .000C
						SCALE .000C

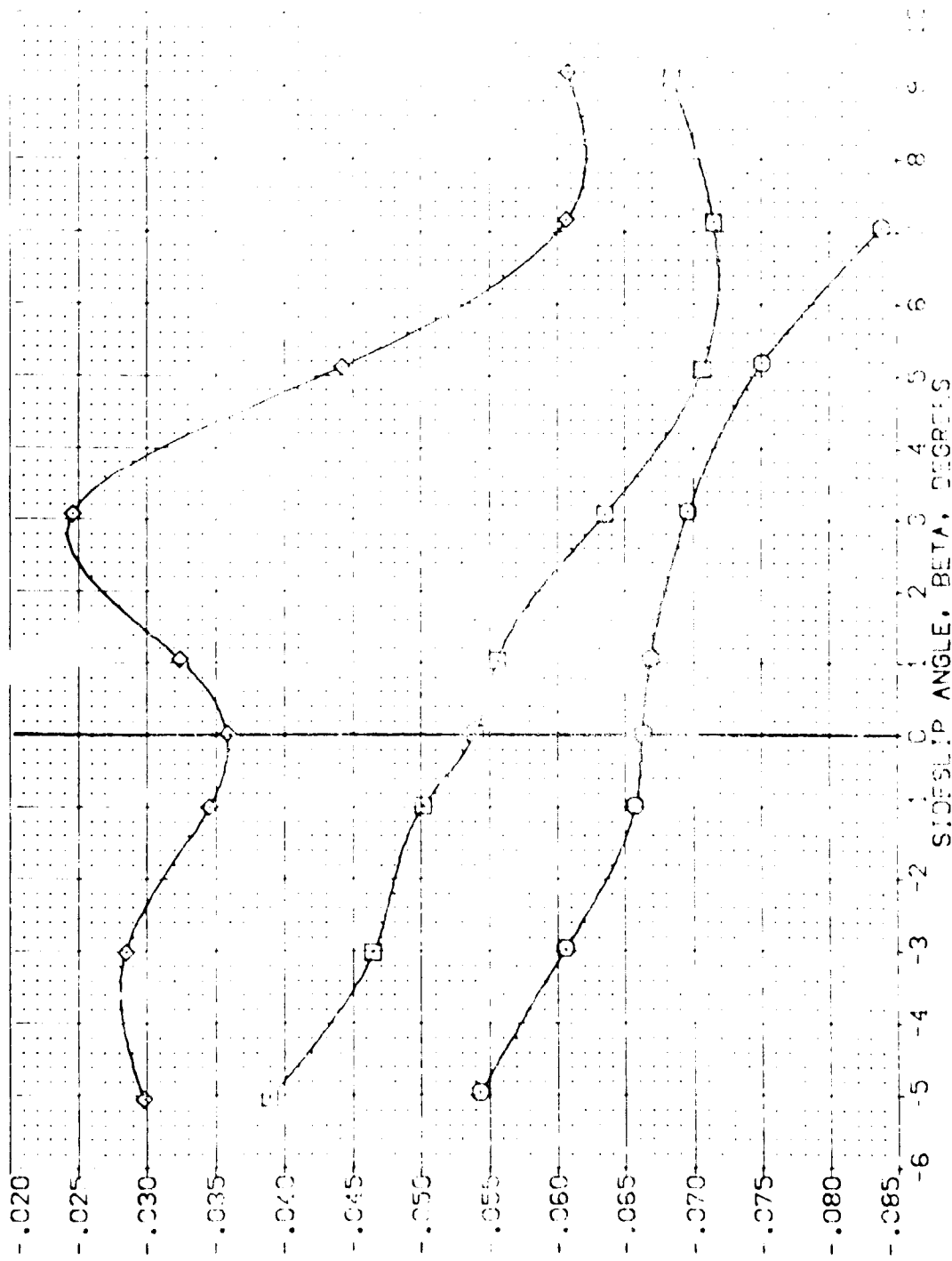


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(O)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(VE0012)	ARC 11-747 B C M F V	0.000	.000	-11.700	25.000	SREF 2.4210 SCALE
(VE0013)	ARC 11-747 B C M F V	10.000	.000	-11.700	25.000	SPREF 14.2440
(VE0014)	ARC 11-747 B C M F V	20.000	.000	-11.700	25.000	CPREF 28.1004
						YREF 32.3010
						YREF 11.2000
						SCALE 1.0000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

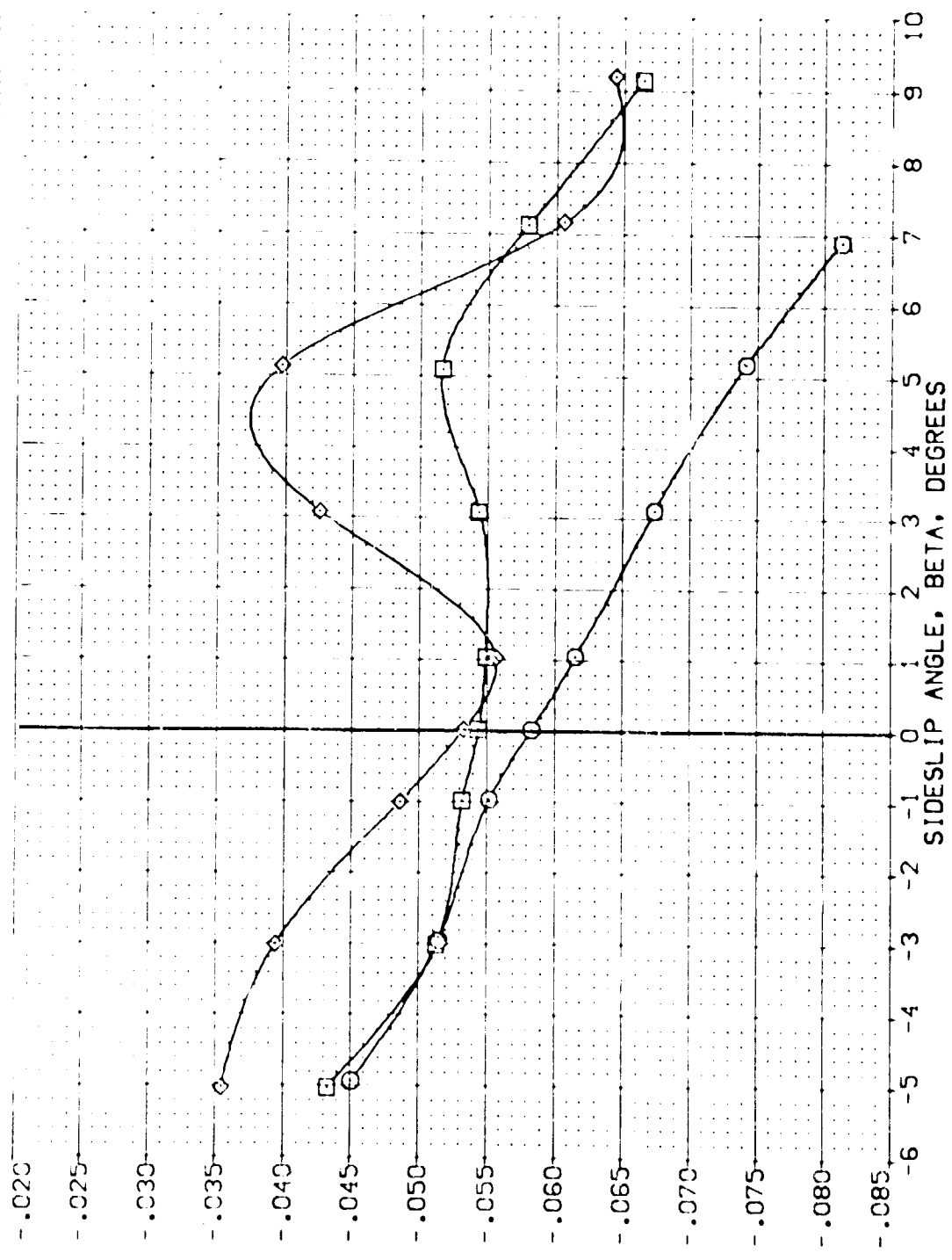


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(E)MACH = 1.20

DATA SET SYMBOL CONFIGURATION DESCRIPTION

[VEJ029] Q ARC 11-747 DASSA B C H F VI V

[VEJ030] Q ARC 11-747 DASSA B C H F VI V

[VEJ031] Q ARC 11-747 DASSA B C H F VI V

ALPHA RUDDER BDLAP SPD BRK

0.000 -10.000 -11.700 25.000

10.000 -10.000 -11.700 25.000

20.000 -10.000 -11.700 25.000

REFERENCE INFORMATION

SPREF 2.4210 SQ.FT.

LPREF 14.2440 IN.

CPREF 28.1004 IN.

APREF 32.3010 IN.

YREF 0.0000 IN.

ZREF 11.2000 IN.

SCALE 1.0000

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

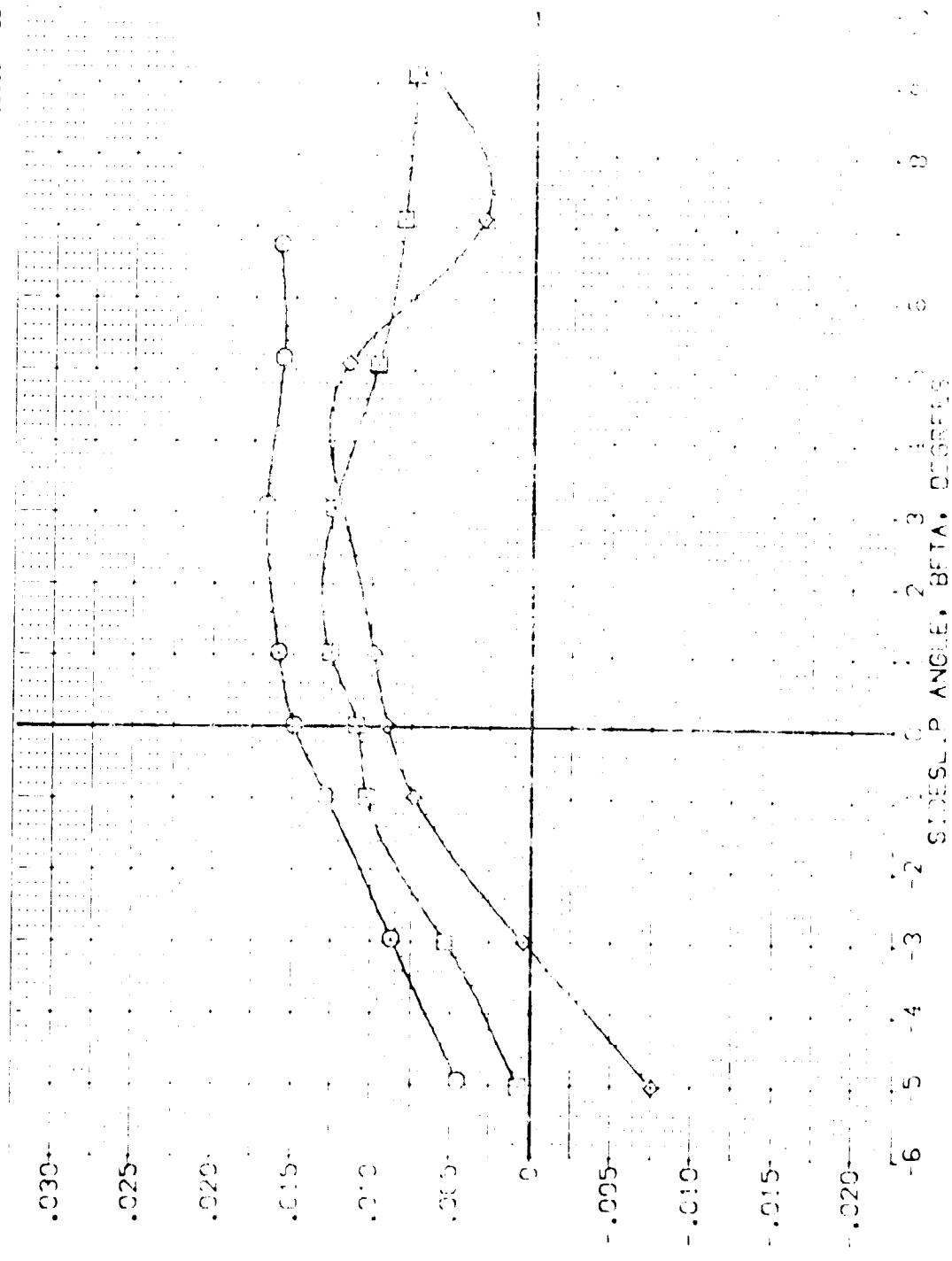


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25.000.  
 (MACH = .60) PAGE 1212



DATA SET SPEED	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	ROFLAP	SPEEDBRK	REFERENCE INFORMATION
(VE) 0.000	ABC 11-747 0A-12A B C A E A V	0.000	-10.000	-11.700	25.000	SPCE 2.4210
(VE) 0.000	ABC 11-747 0A-12A B C A E A V	10.000	-10.000	-11.700	25.000	SPCE 14.2420
(VE) 0.000	ABC 11-747 0A-12A B C A E A V	20.000	-10.000	-11.700	25.000	SPCE 28.1000
(VE) 0.000	ABC 11-747 0A-12A B C A E A V					SPCE 32.0000
						YMPD 11.0000
						YMPD 11.0000
						SCALE 10.000

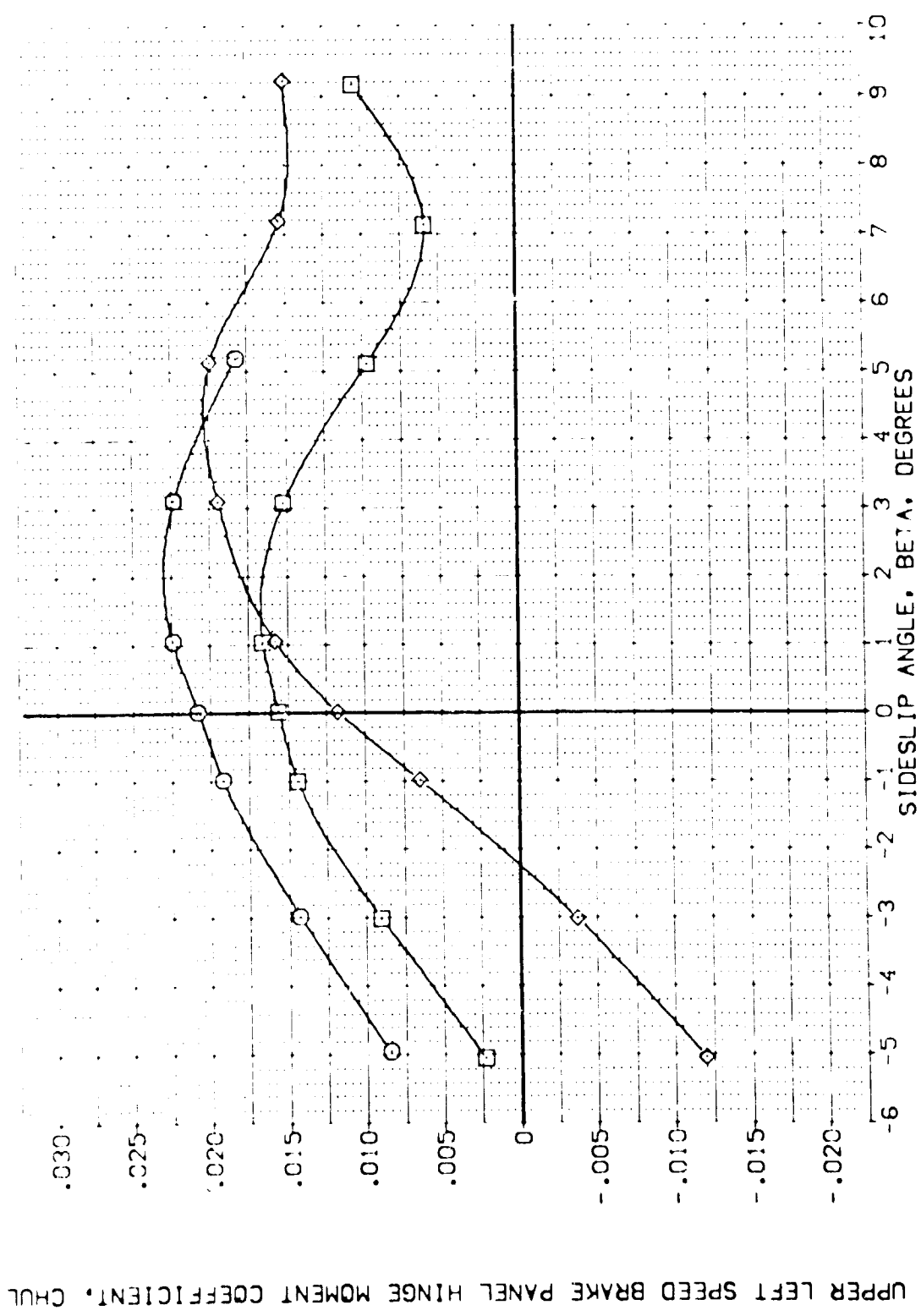
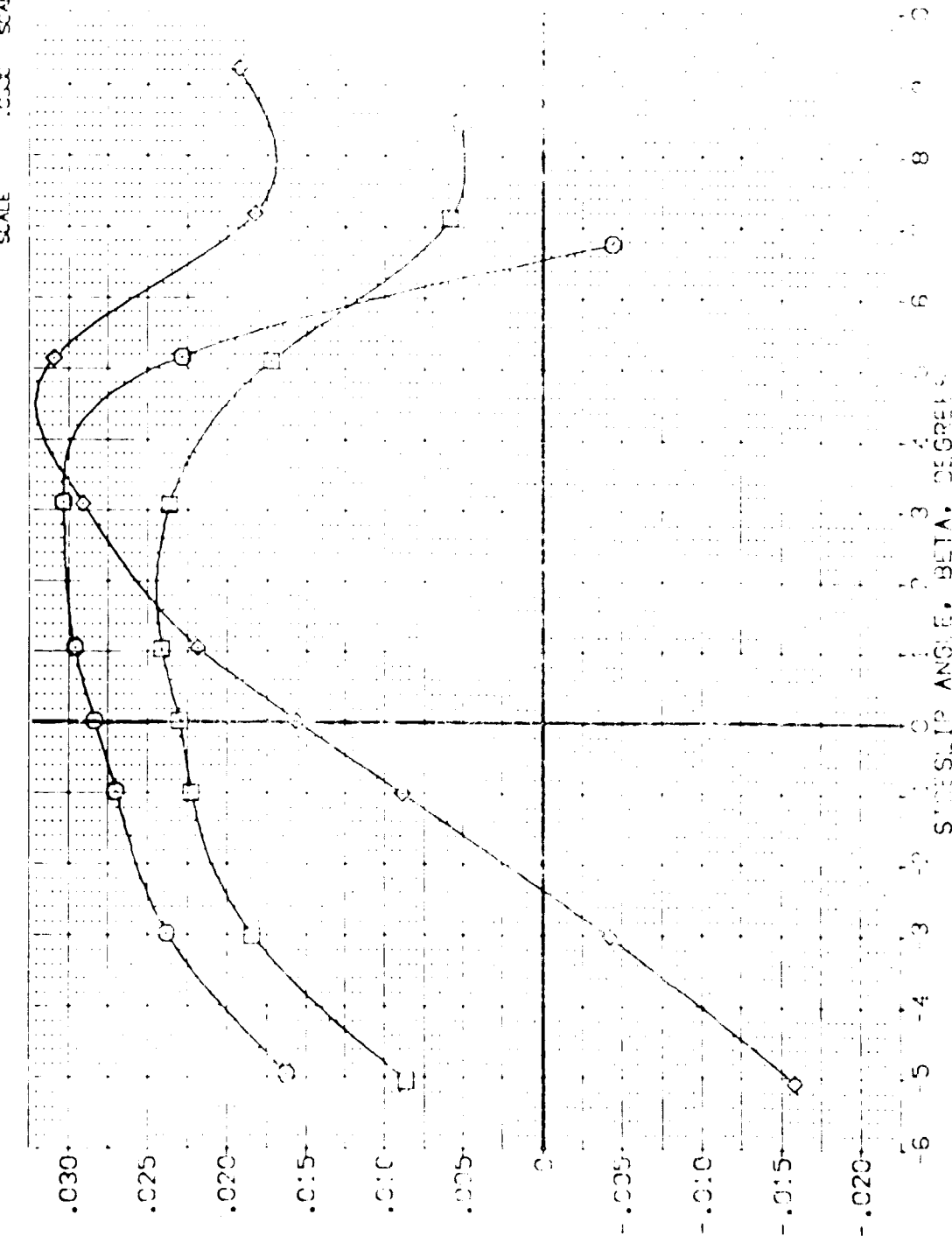


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(B) MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPDBRK	REFERENCE INFORMATION
(VEJ029)	ARC 11-747 QAS3A B C H F V V	0.000	-10.000	-11.700	25.000	SREF 2.421C SQ.FT.
(VEJ030)	ARC 11-747 QAS3A B C H F V V	10.000	-10.000	-11.700	25.000	LREF 14.244C
(VEJ031)	ARC 11-747 QAS3A B C H F V V	20.000	-10.000	-11.700	25.000	BREF 28.1004
						XREF 30.001C
						YREF 0.000C
						ZREF 11.200C
						SCALE 1.000C



UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

FIG. 47 RUDDER PANEL HINGE MOMENT'S VERSUS ANGLE OF ATTACK, SPEED OF WIND = 20 KTS.  
(C)MACH = .90



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAK	REFERENCE INFORMATION
(YE4029)	ARC 11-747 DA53A B C M F VI V	.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE4030)	ARC 11-747 DA53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2140 IN.
(YE4031)	ARC 11-747 DA53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.9310 IN.
						YREF 0.000 IN.
						ZREF 11.2100 IN.
						SCALE .0030

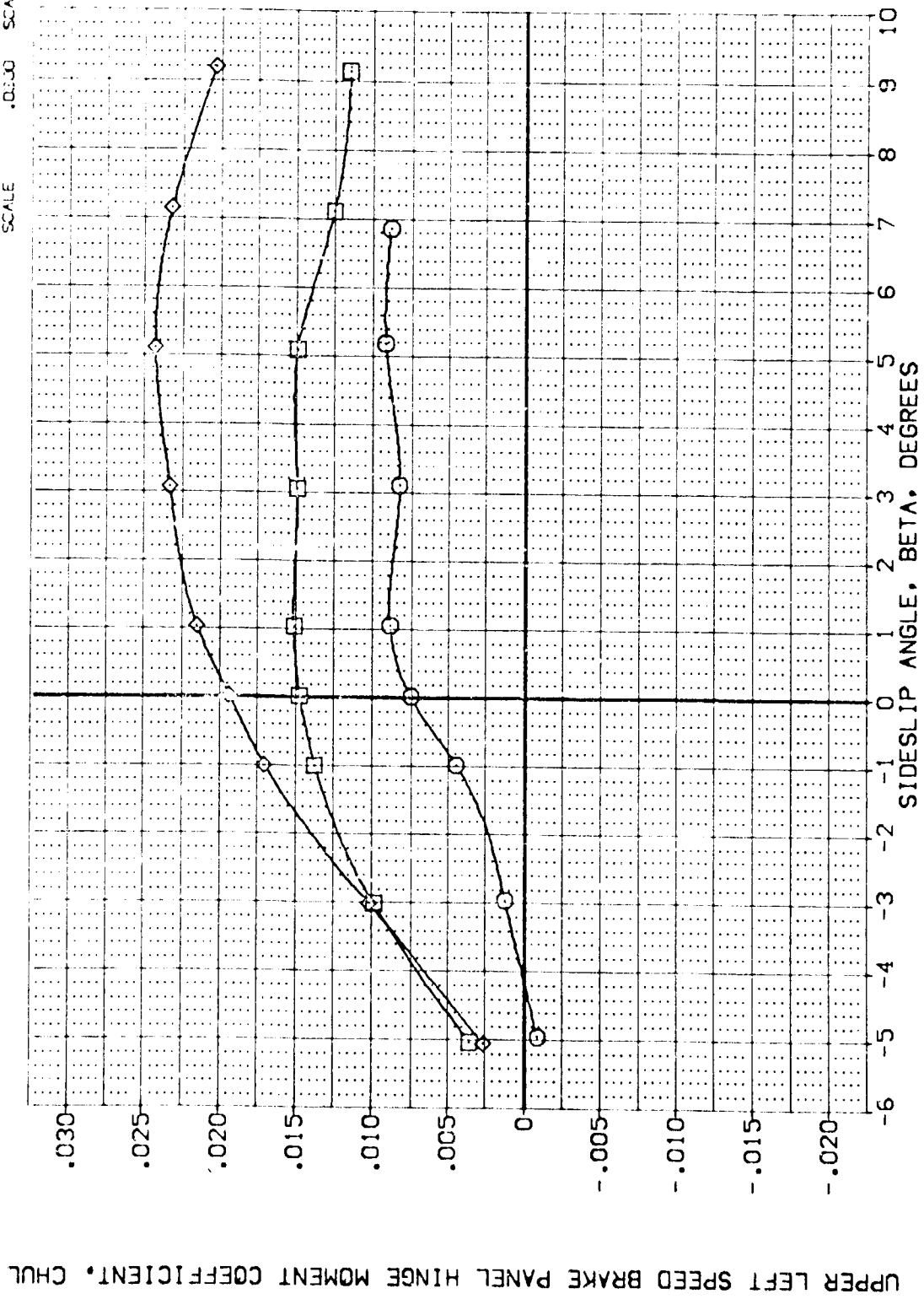


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (0)MACH = 1.05

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	ROFLAP	SPOBRK	REFERENCE INFORMATION
(YEJ029)	ARC 11-747 0A53A B C M F V1 V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YEJ030)	ARC 11-747 0A53A B C M F V1 V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(YEJ031)	ARC 11-747 0A53A B C M F V1 V	20.000	-10.000	-11.700	25.000	BREF 20.1004 IN.
						YMCP 32.5010 IN.
						YMCP 11.2500 IN.
						SCALE .0300

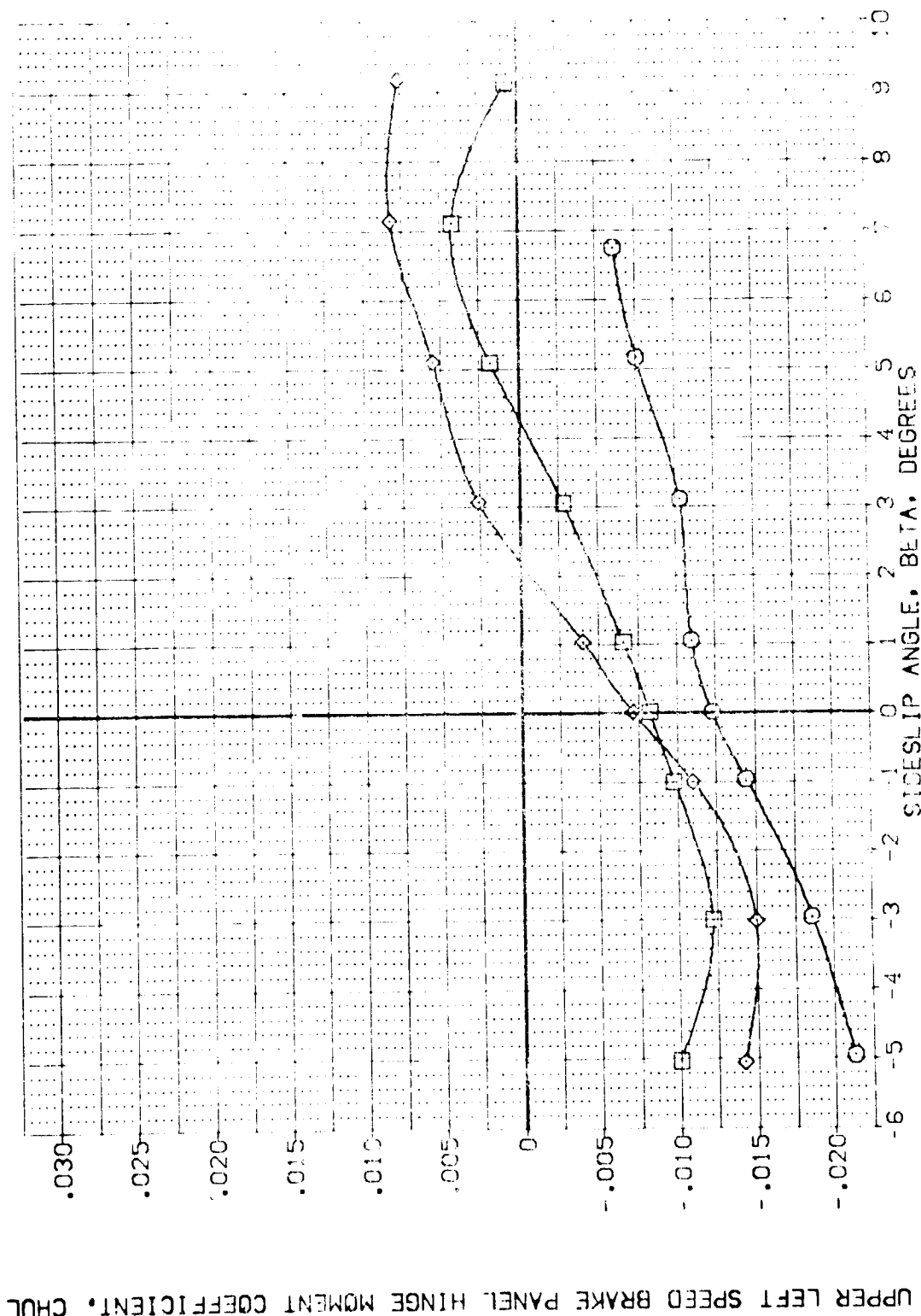


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPEEDBRAKE	REFERENCE INFORMATION
(YE4029)	ARC 11-747 BA53A B C H F V	0.000	-10.000	-11.750	25.000	2.4210 SQ.FT.
(YE4030)	ARC 11-747 BA53A B C H F V	10.000	-10.000	-11.750	25.000	14.2440 IN.
(YE4031)	ARC 11-747 BA53A B C H F V	20.000	-10.000	-11.750	25.000	26.1004 IN.
						32.9010 IN.
						0.0000 IN.
						11.0000 IN.
						SCALE

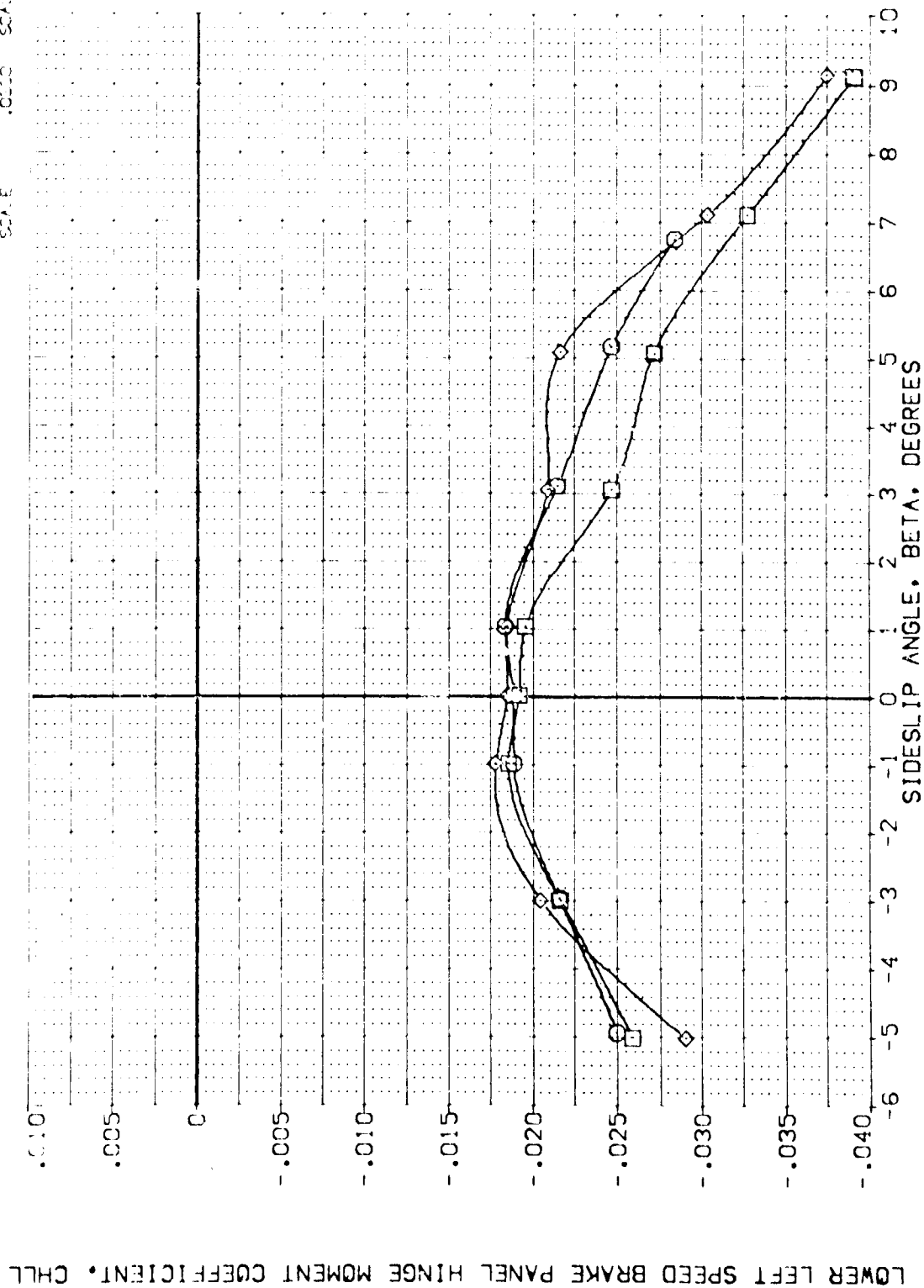


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 DA53A B C M F V1 V NOM. RVL  
 ARC 11-747 DA53A B C M F V1 V NOM. RVL  
 ARC 11-747 DA53A B C M F V1 V NOM. RVL

ALPHA RUDDER BOFLAP SPOBRK  
 .000 -10.000 -11.700 25.000  
 10.000 -10.000 -11.700 25.000  
 20.000 -10.000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2410 IN.  
 EREF 20.1004 IN.  
 XMRP 32.3310 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2000 IN.  
 SCALE .0300 SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

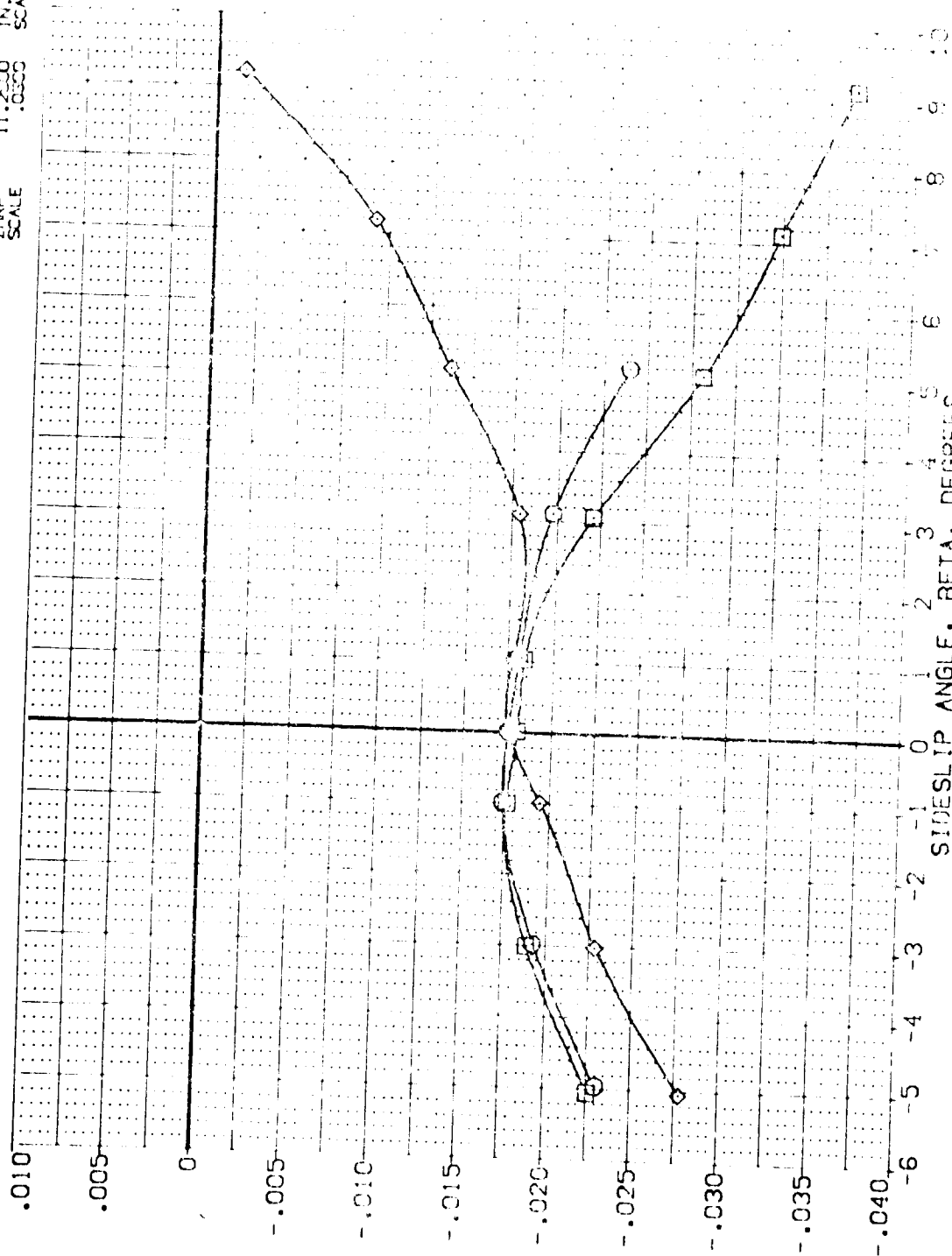


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 MACH = .80



DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
[YEJ009]	ARC 11-747 DAS3A B C M F VI V	SREF 2.4210 SQ.FT.
[YEJ030]	ARC 11-747 DAS3A B C M F VI V	LREF 14.2470 IN.
[YEJ031]	ARC 11-747 DAS3A B C M F VI V	BREF 26.1004 IN.
		XMRP 32.0010 IN.
		YMRP 11.2500 IN.
		ZMRP 11.0300 IN.
		SCALE

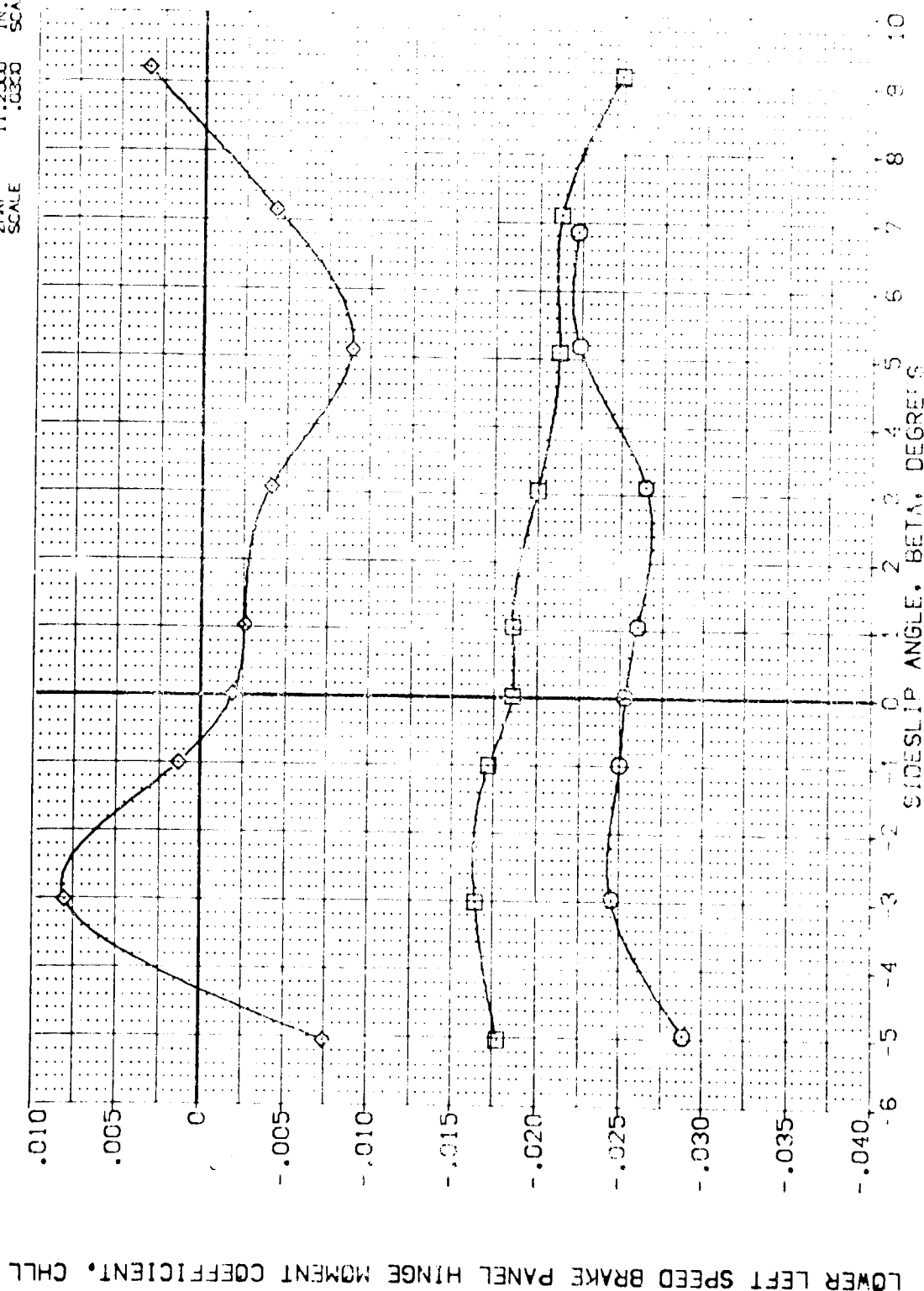


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEED BRAKE = 25 DEG.  
C<sub>D</sub>MACH = 1.05

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BOFLAP    SPEED    REFERENCE INFORMATION    SCALE

(VE-029)	APC 11-747 C-53A B C M F V	0.000	10.000	-11.700	25.000	SPREF	2.4210	SCALE
(VE-030)	APC 11-747 C-53A B C M F V	10.000	10.000	-11.700	25.000	REF	14.2443	
(VE-031)	APC 11-747 C-53A B C M F V	20.000	10.000	-11.700	25.000	REF	23.1051	
						REF	32.0010	
						REF	41.0000	
						REF	50.0000	
						REF	60.0000	
						REF	70.0000	
						REF	80.0000	
						REF	90.0000	
						REF	100.0000	

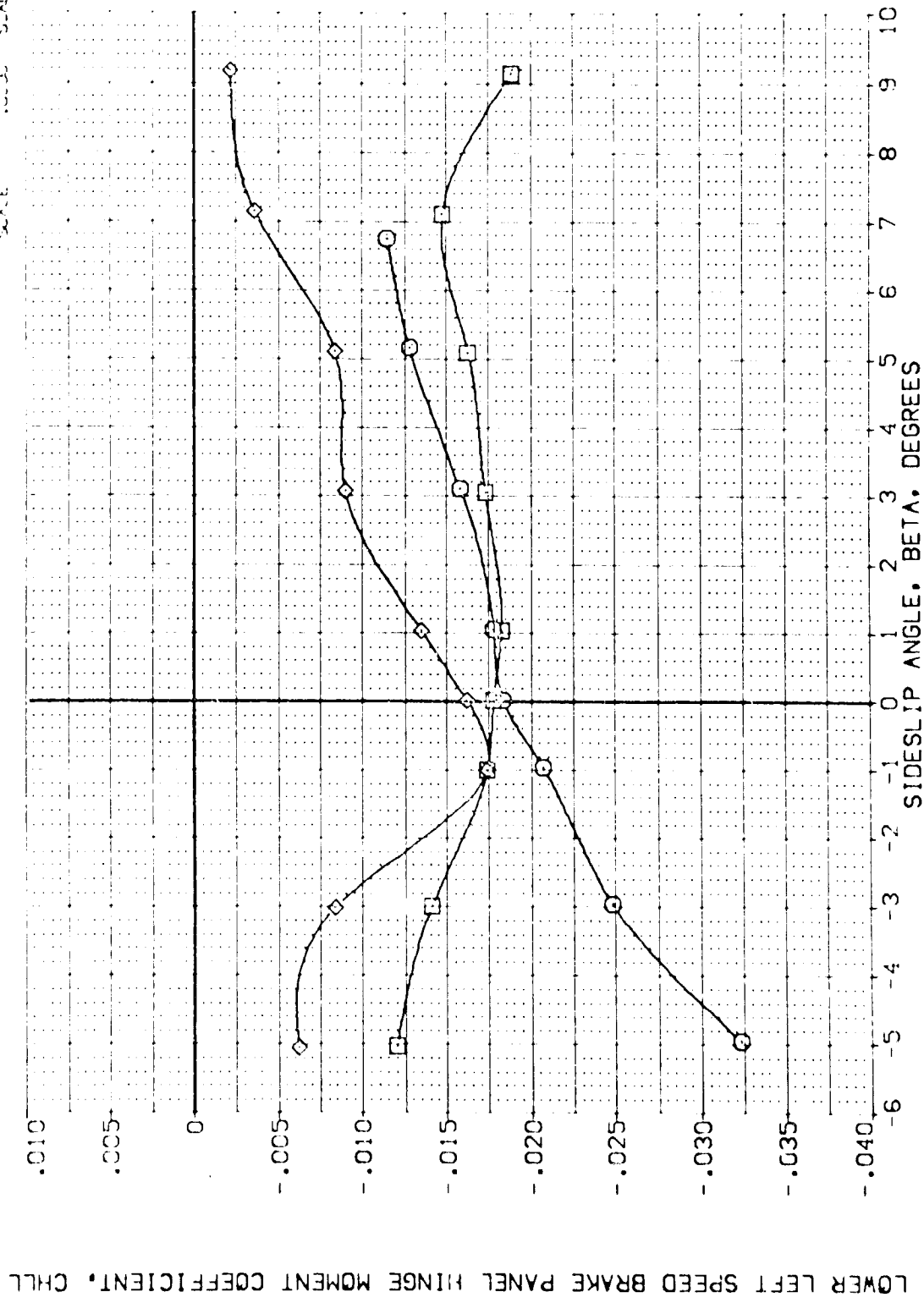


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (EDMACH = 1.20)      PAGE 1219

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BDFLAP    SPEEDBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BDFLAP	SPEEDBRK	REFERENCE INFORMATION
(YE1029)	ARC 11-747 0A53A B C M F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
(YE4030)	ARC 11-747 0A53A B C M F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(YE4031)	ARC 11-747 0A53A B C M F VI V	20.000	-10.000	-11.700	25.000	BREF 26.1004 IN.
						XMREF 32.3010 IN.
						YMREF 0.0000 IN.
						ZMREF 11.2500 IN.
						SCALE 0.0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

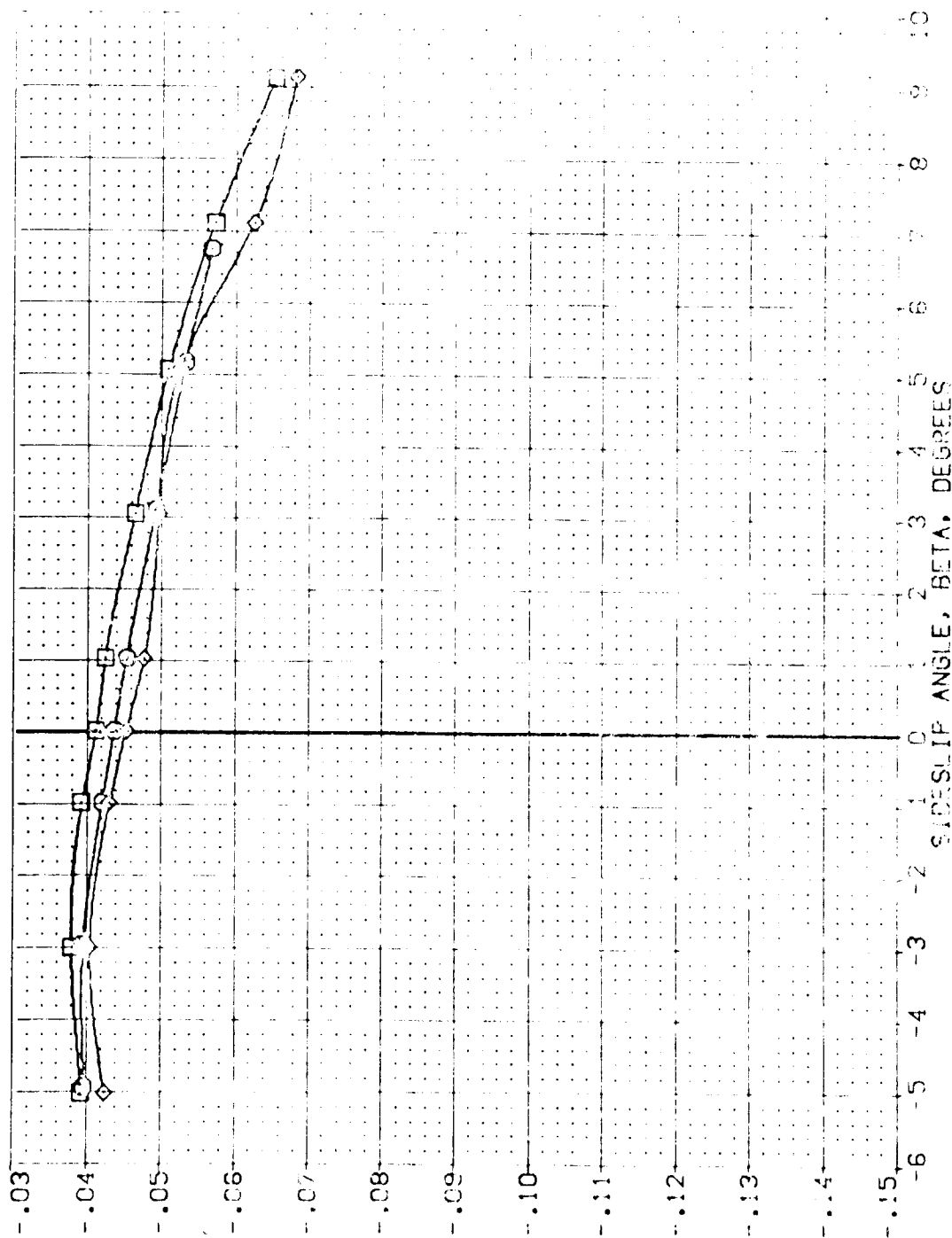


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(MACH = .60





DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YE4029)	ARC 11-747 DA53A B C H F VI V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ. FT.
(YE4030)	ARC 11-747 DA53A B C H F VI V	10.000	-10.000	-11.700	25.000	LREF 14.2440 IN.
(YE4031)	ARC 11-747 DA53A B C H F VI V	20.000	-10.000	-11.700	25.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 0.0000 IN.
						ZREF 11.2500 IN.
						SCALE 0.0000

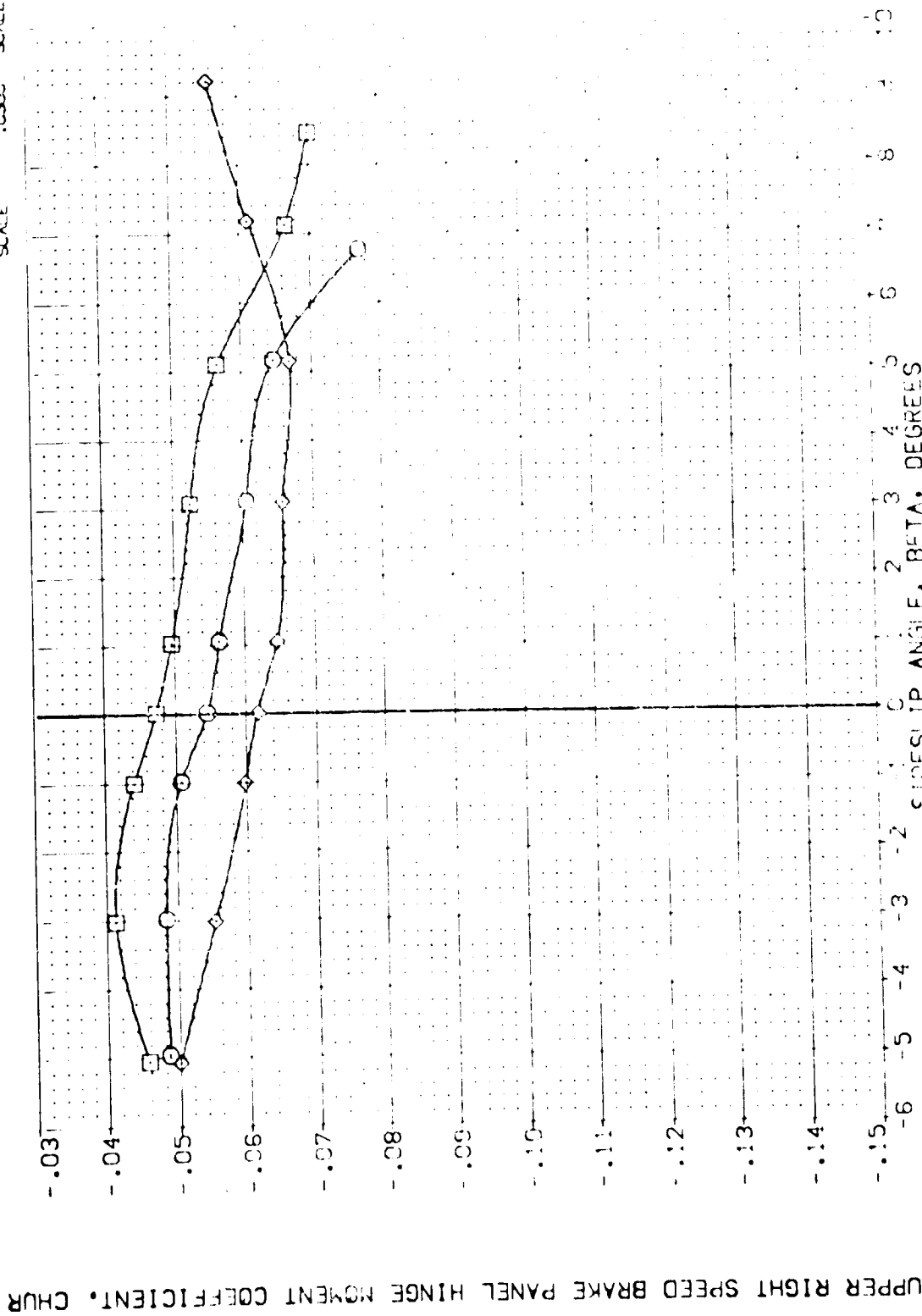


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	80% LAP	SPEED	REFERENCE INFORMATION
(VE-029)	ARC 11-147	CAS2A B C H E V	0.00	0.00	-11.700	25.000	2.4210 52.17
(VE-030)	ARC 11-147	CAS3A B C H E V	10.000	0.00	-11.700	25.000	14.2440 100
(VE-031)	ARC 11-147	CAS3A B C H E V	20.000	0.00	-11.700	25.000	20.1004 100

ALPHA 0.00 10.000 20.000  
 RUDDER 0.00 0.00 0.00  
 80% LAP -11.700 -11.700 -11.700  
 SPEED 25.000 25.000 25.000  
 REFERENCE INFORMATION 2.4210 52.17  
 14.2440 100  
 20.1004 100  
 32 3010 100  
 0.000 100  
 11.2500 100  
 SCALE 10.000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

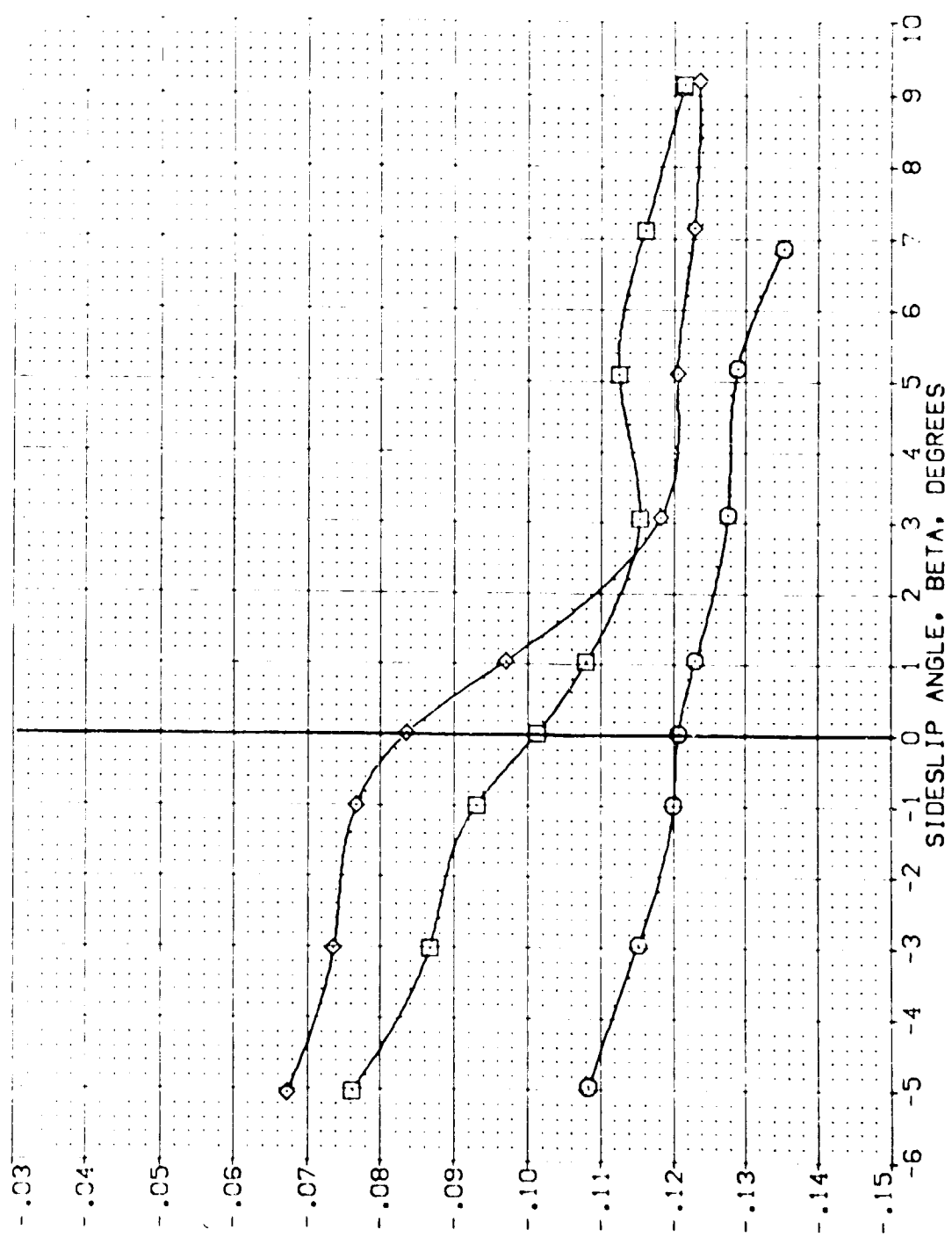


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (C)MACH = 1.05

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD FLAP	SPOILER	REFERENCE INFORMATION
(YE4028)	ARC 11-747 DA53A B C H F V	0.000	-10.000	-11.700	25.000	SRF 2.42.0 SCALE
(YE4030)	ARC 11-747 DA53A B C H F V	10.000	-10.000	-11.700	25.000	LRF 14.244C
(YE4031)	ARC 11-747 DA53A B C H F V	20.000	-10.000	-11.700	25.000	EXP 28.100A
						YMAP 32.30.0
						YMAP 00.000
						ZMP 11.000
						SCALE .0000

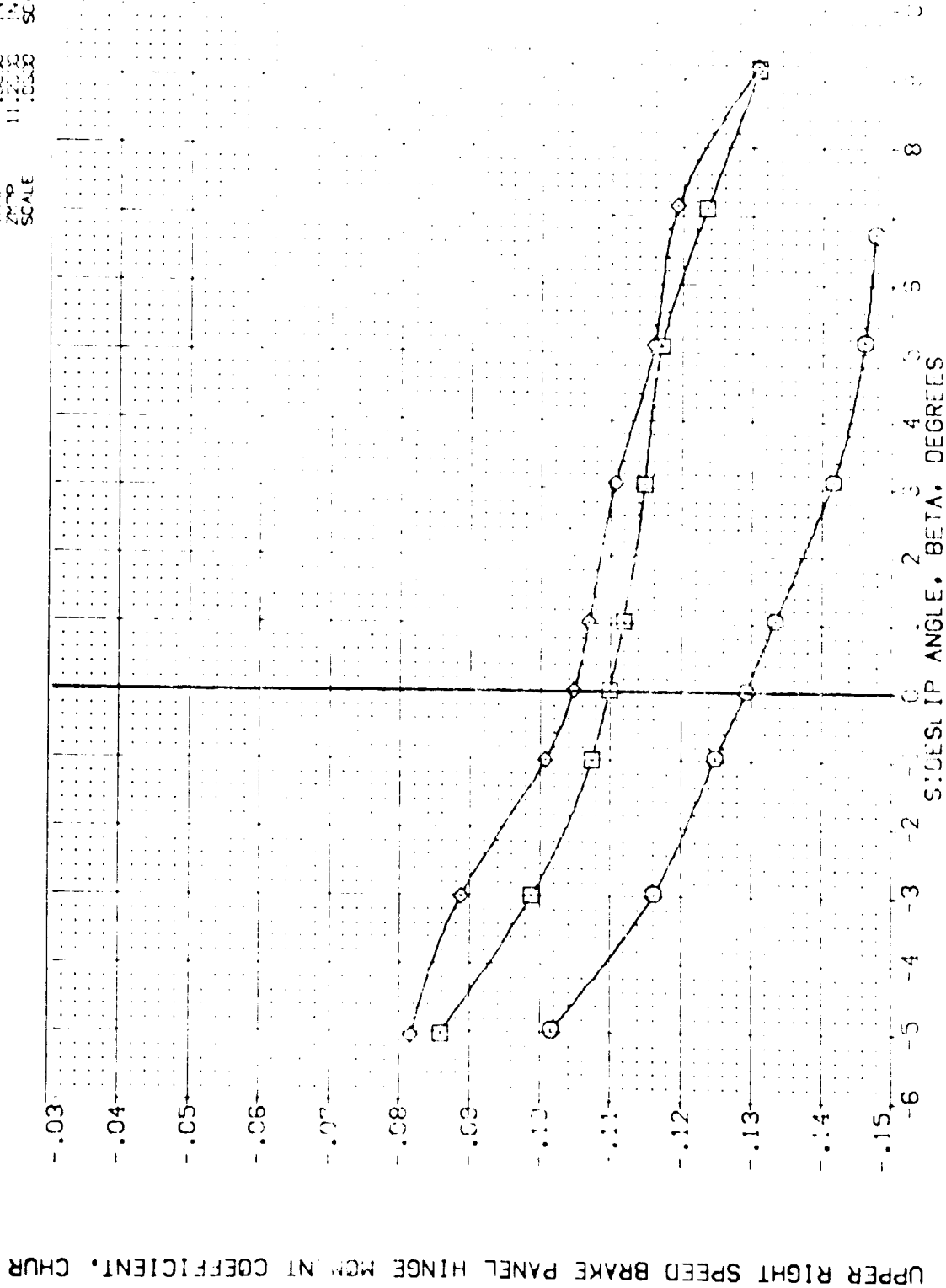


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE - 20 DEG.

(E)MACH = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOG LIP	SPEED	REFERENCE INFORMATION
ARC 11-747	2A53A B C H F V	0.000	-10.000	-11.700	25.000	2.4210 SCALE
ARC 11-747	2A53A B C H F V	10.000	-10.000	-11.700	25.000	14.2440 SCALE
ARC 11-747	2A53A B C H F V	20.000	-10.000	-11.700	25.000	28.1304 SCALE
						30.1304 SCALE
						11.2440 SCALE
						11.2440 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

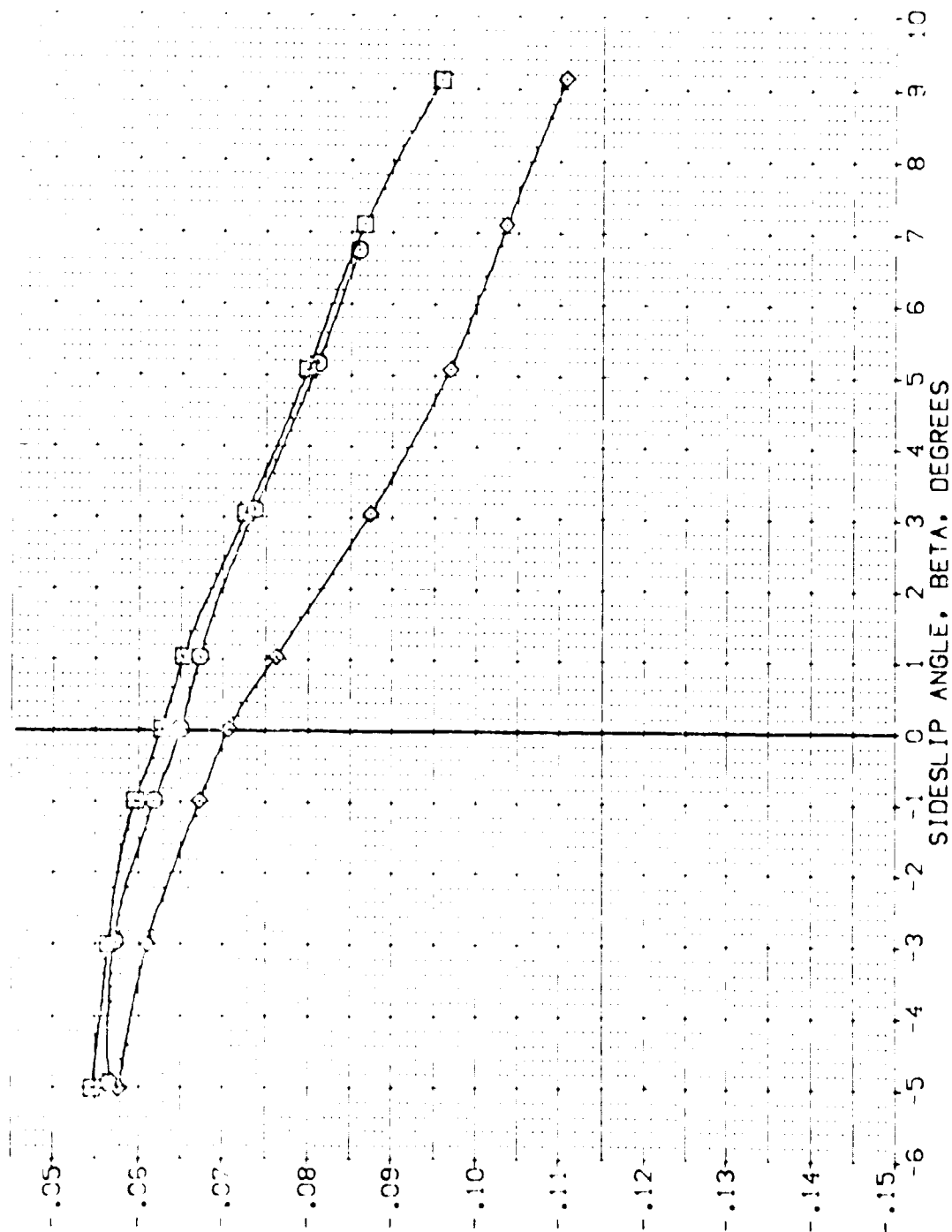


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(YEL029)	ARC 11-747 CAS3A B C H F VI V	SRFF 2.421C SC.F.F.
(YEL030)	ARC 11-747 CAS3A B C H F VI V	LR.F 14.244C
(YEL031)	ARC 11-747 CAS3A B C H F VI V	BR.F 28.1004
		YPRP 32.301C
		ZPRP .000C
		SCALE 11.250C
		SCALE .000C

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

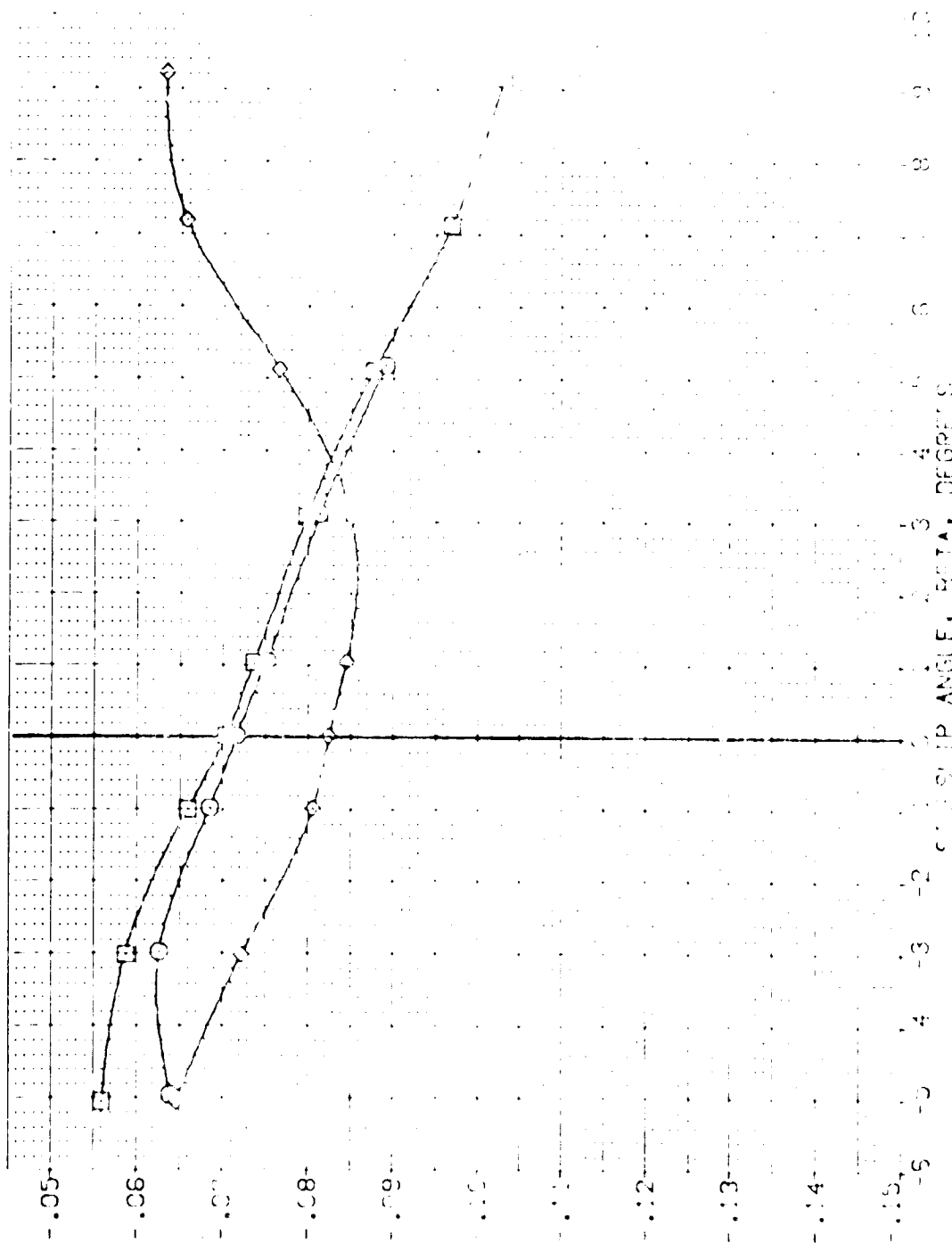


FIG. 47 RUDDER PANEL HINGE MOMENT'S VERSUS ANGLE OF ATTACK, SPEED BRAKE 25.10.  
(B)MACH = .80

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YE4028)	ARC 11-747 CASSA B C M F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 50.000
(YE4030)	ARC 11-747 CASSA B C M F V	10.000	-10.000	-11.700	25.000	LREF 14.2440 11.000
(YE4031)	ARC 11-747 CASSA B C M F V	20.000	-10.000	-11.700	25.000	BREF 28.1000 11.000
						XREF 32.0000 11.000
						YREF 11.0000 11.000
						ZREF 11.0000 11.000
						SCALE 11.0000 11.000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CLRR

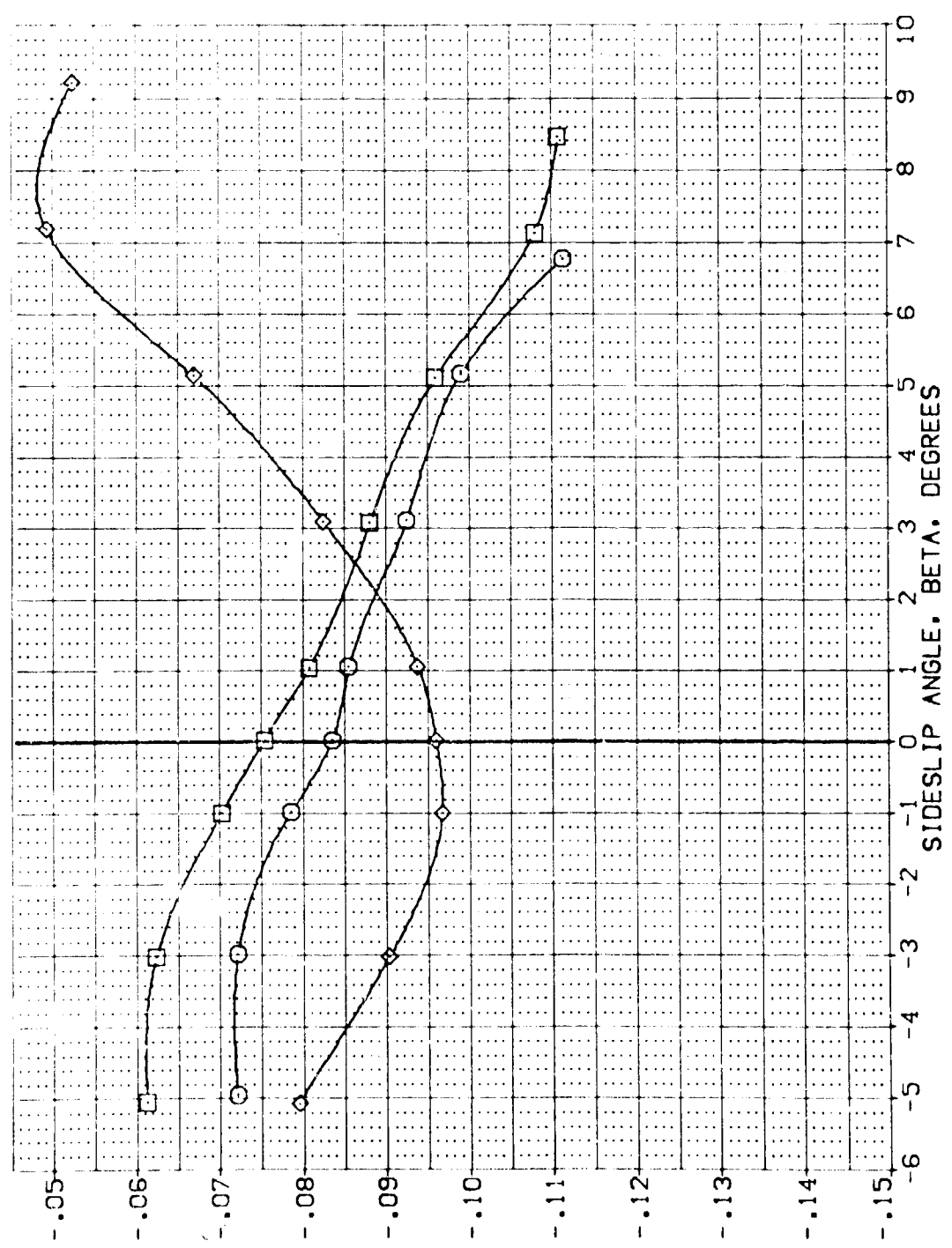


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 QAS3A B C H F VI V NOT: RV/L

ARC 11-747 QAS3A B C H F VI V NOT: RV/L

ARC 11-747 QAS3A B C H F VI V NOT: RV/L

ALPHA RUDDER BOELAP SPOBRK

0.000 -10.000 -11.700 25.000

10.000 -10.000 -11.700 25.000

20.000 -10.000 -11.700 25.000

REFERENCE INFORMATION

SREF 2.4210 SQ.FT.

LREF 14.2440 IN.

BREF 20.1004 IN.

XMPD 32.3010 IN.

YMPD 22.000 IN.

ZMPD 11.2000 IN.

SCALE .0000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

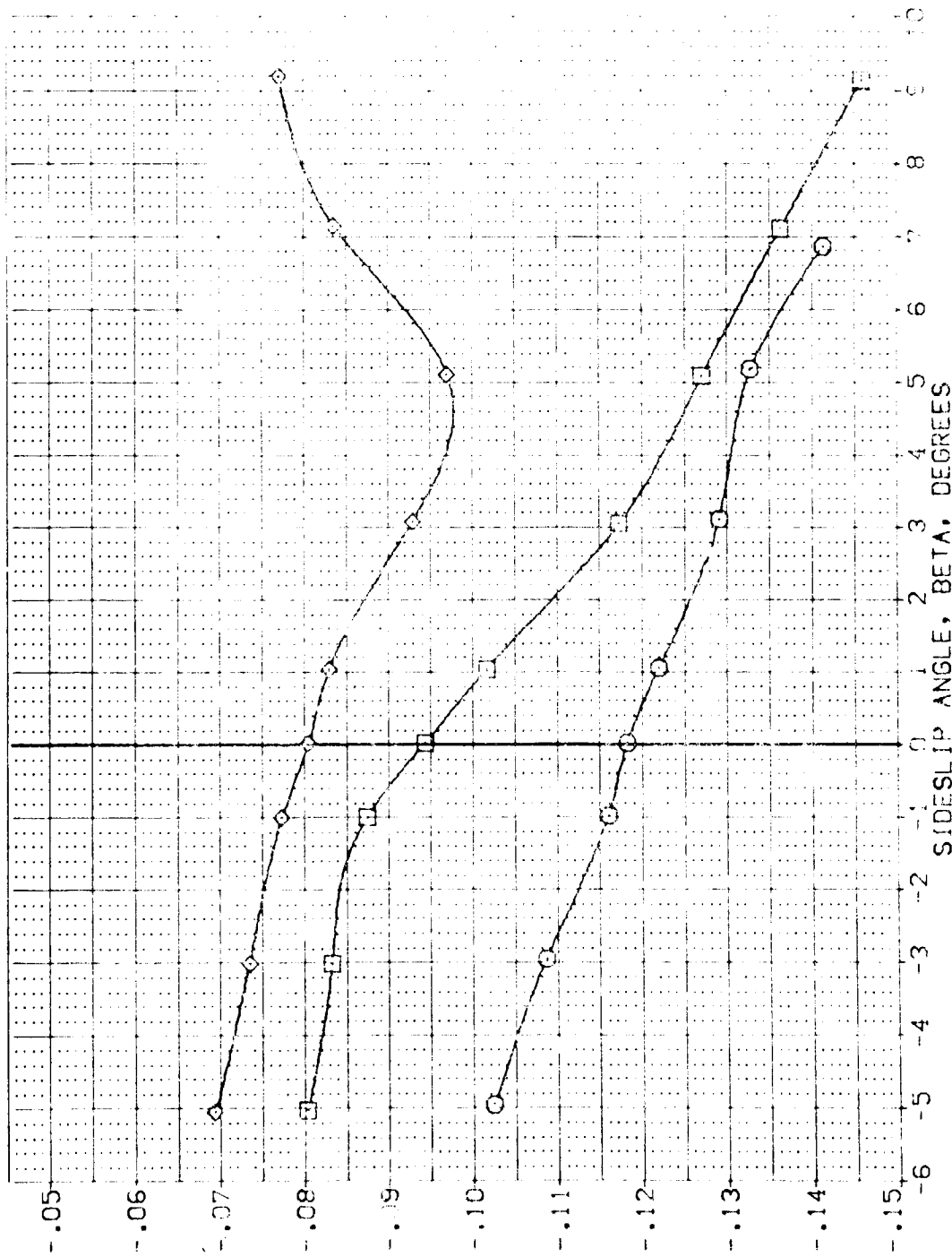


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(O)MACH = 1.05



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD LAP	SPEED	REFERENCE INFORMATION
[VEJ029]	ARC 11-747 CASSA B C H F V	0.000	-10.000	-11.700	25.000	SREF 2.4210 SQ.FT.
[VEJ030]	ARC 11-747 CASSA B C H F V	10.000	-10.000	-11.700	25.000	LREF 14.2140
[VEJ031]	ARC 11-747 CASSA B C H F V	20.000	-10.000	-11.700	25.000	BREF 28.1004
						AMREF 32.4010
						YMREF 11.0000
						ZMREF 11.0000
						SCALE 11.0000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

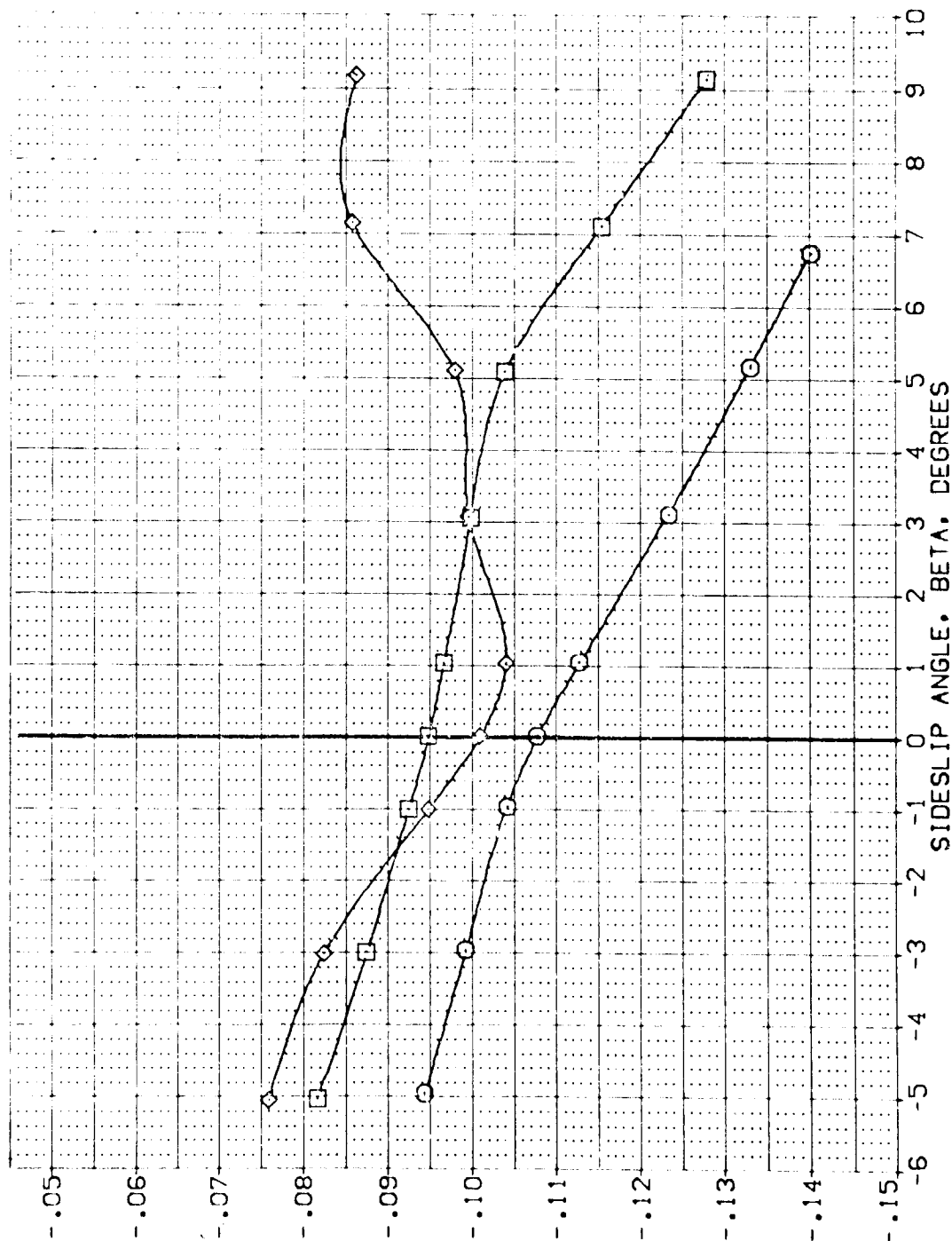


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(C)MACH = 1.20

DATA SET SYMB: (YEA32) (YEA33) (YEA34)

CONFIGURATION DESCRIPTION: ARC 11-747 BASSA B C M F V1 V NOM. RV/L DATA NOT AVAILABLE ARC 11-747 BASSA B C M F V1 V NOM. RV/L

ALPHA	RUDDER	BD/LAP	SPOBRK	REFERENCE INFORMATION
.000	-25.000	-11.700	25.000	SREF 2.4210 SQ.FT.
10.000	-25.000	-11.700	25.000	LREF 14.2440 IN.
20.000	-25.000	-11.700	25.000	GREF 28.1004 IN.
				XMRP 32.3010 IN.
				YMRP .0000 IN.
				ZMRP 11.2000 IN.
				SCALE .0300

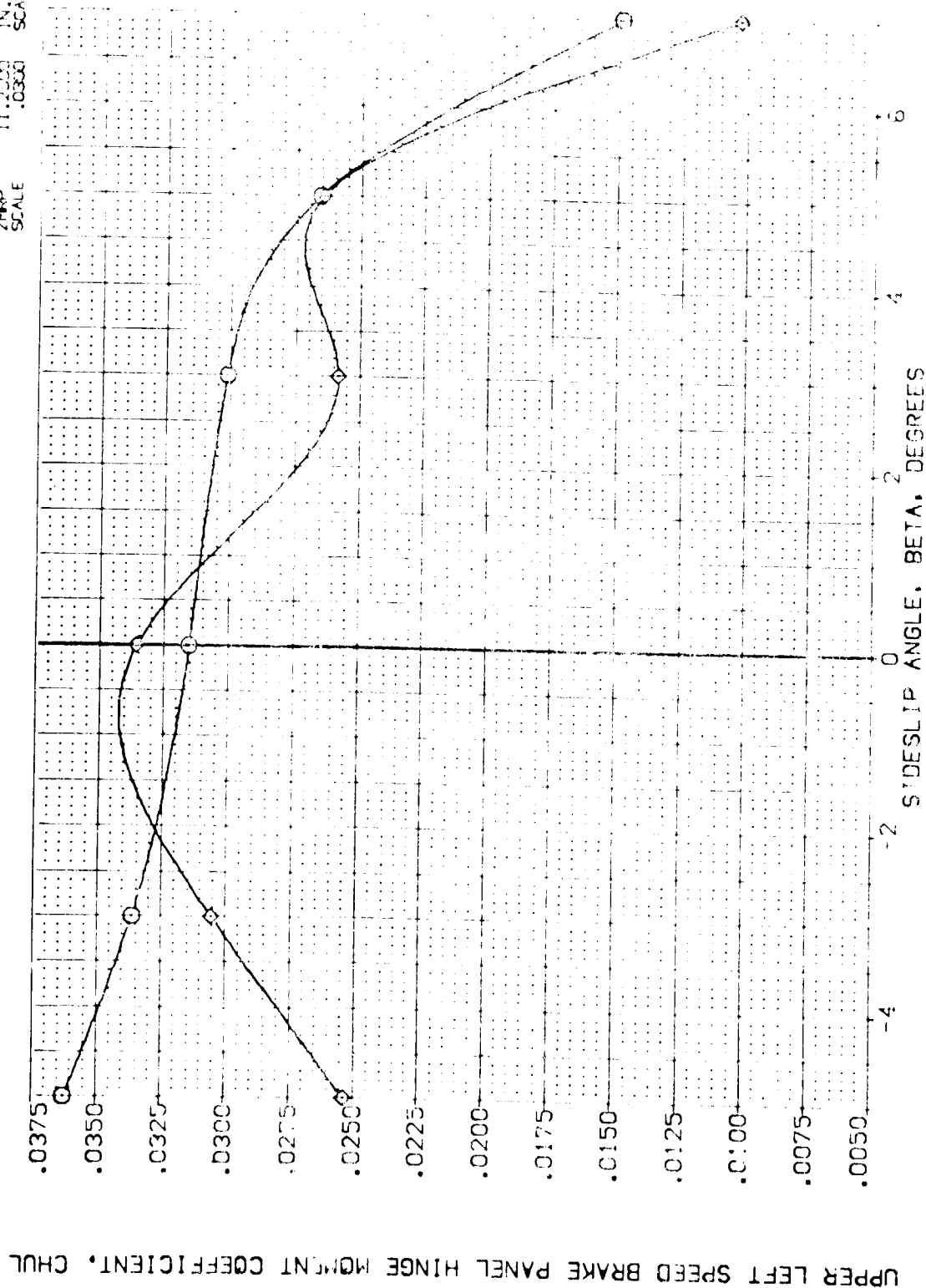


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

CALMACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(VEJA32)	ARC 11-747 QAS3A B C M F VI V	.000	-25.000	-11.700	25.000	SREF 2.4213 SQ.FT.
(VEJA33)	ARC 11-747 QAS3A B C M F VI V	10.000	-25.000	-11.700	25.000	LRREF 14.2443
(VEJA34)	ARC 11-747 QAS3A B C M F VI V	20.000	-25.000	-11.700	25.000	BRREF 28.1004
						XREF 32.3013
						YREF 11.0000
						ZREF 11.2500
						SCALE .0000

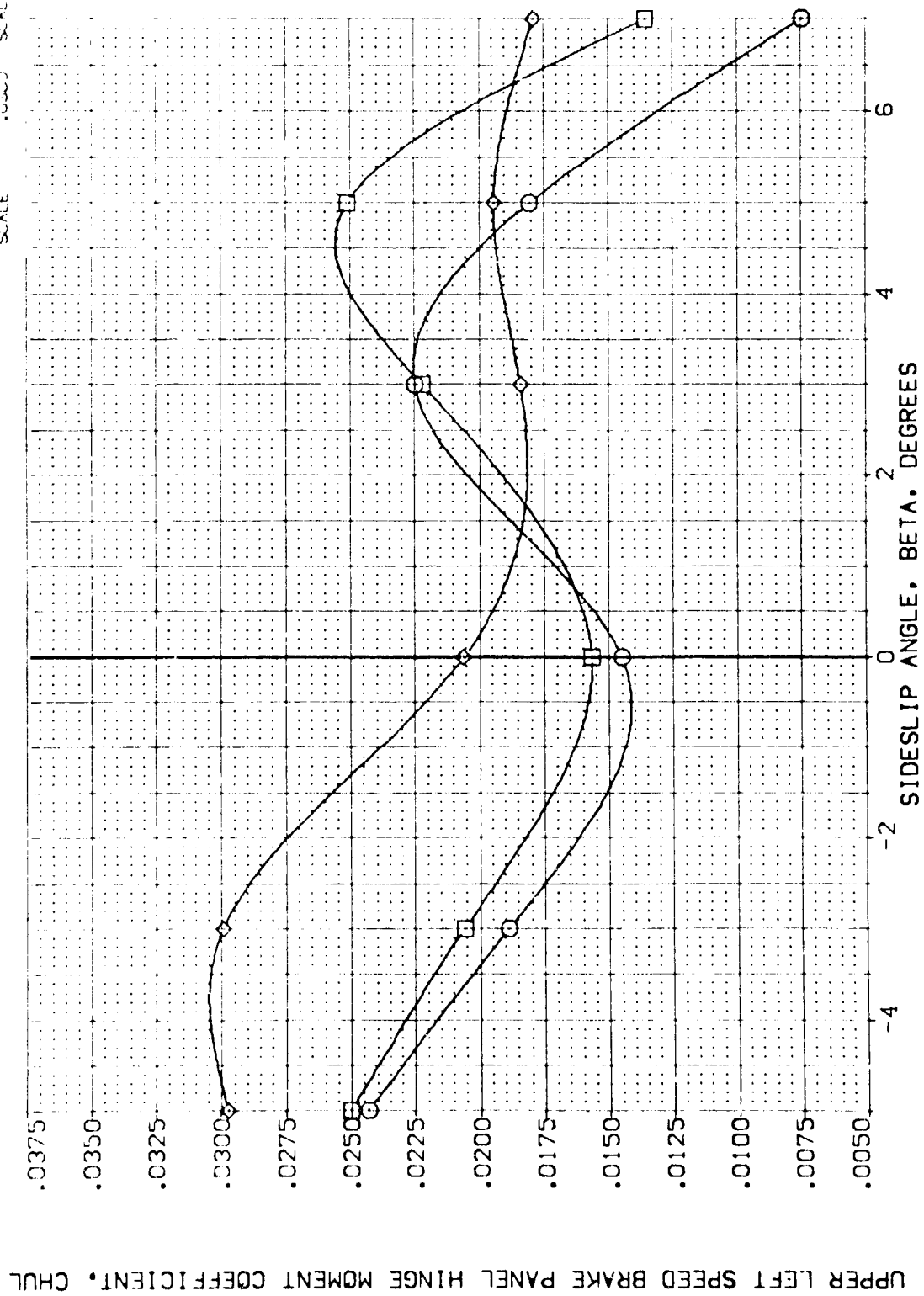


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(B)MACH = .90

DATA SET SYMBOL: [YEJA32] [YEJA33] [YEJA34]

CONFIGURATION DESCRIPTION: ARC 11-747 QAS3A B C H F VI V DATA NOT AVAILABLE ARC 11-747 QAS3A B C H F VI V

ALPHA: .000 10.000 20.000

RUDDER: -25.000 -25.000 -25.000

BOFLAP: -11.700 -11.700 -11.700

SPEEDBRK: 25.000 25.000 25.000

REFERENCE INFORMATION: SREF 2.4210 SQ.F. LREF 14.2440 IN. BREF 28.1004 IN. XMRP 32.3010 IN. YMRP .0000 IN. ZMRP 11.2530 IN. SCALE .0300

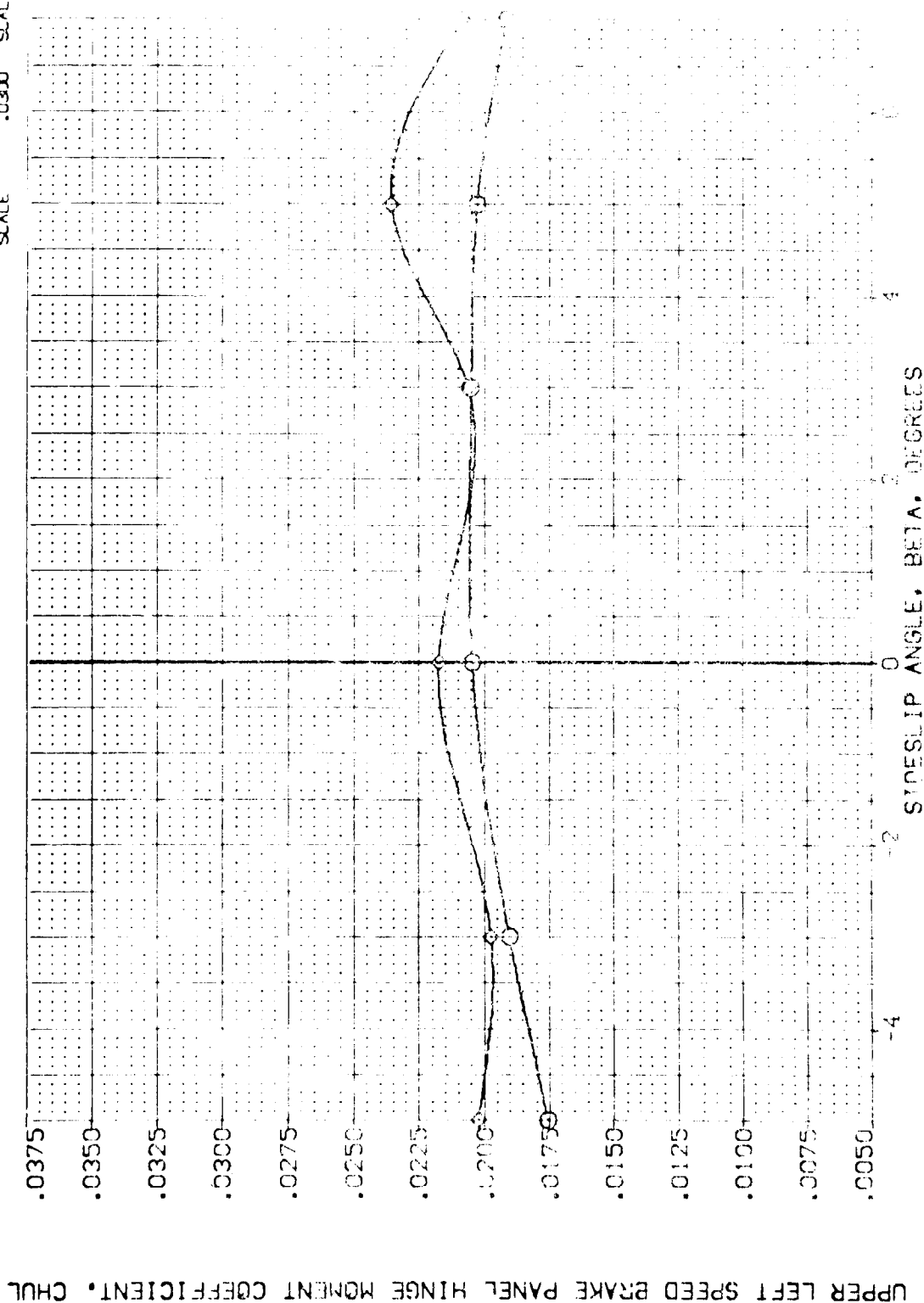


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK. SPEEDBRAKE = 25 DEG.

(C)MACH = 1.20



DATA SET SYMBOL  
 (YEA32)  
 (YEA33)  
 (YEA34)

CONFIGURATION DESCRIPTION  
 ARC 11-747 OAS3A B C H F VI V  
 ARC 11-747 OAS3A B C H F VI V  
 ARC 11-747 OAS3A B C H F VI V

NON: RV/L  
 NON: RV/L  
 NON: RV/L

ALPHA RUDDER BOFLAP SPEEDRY  
 .000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 25.000  
 20.000 -25.000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 50. FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP 0.000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

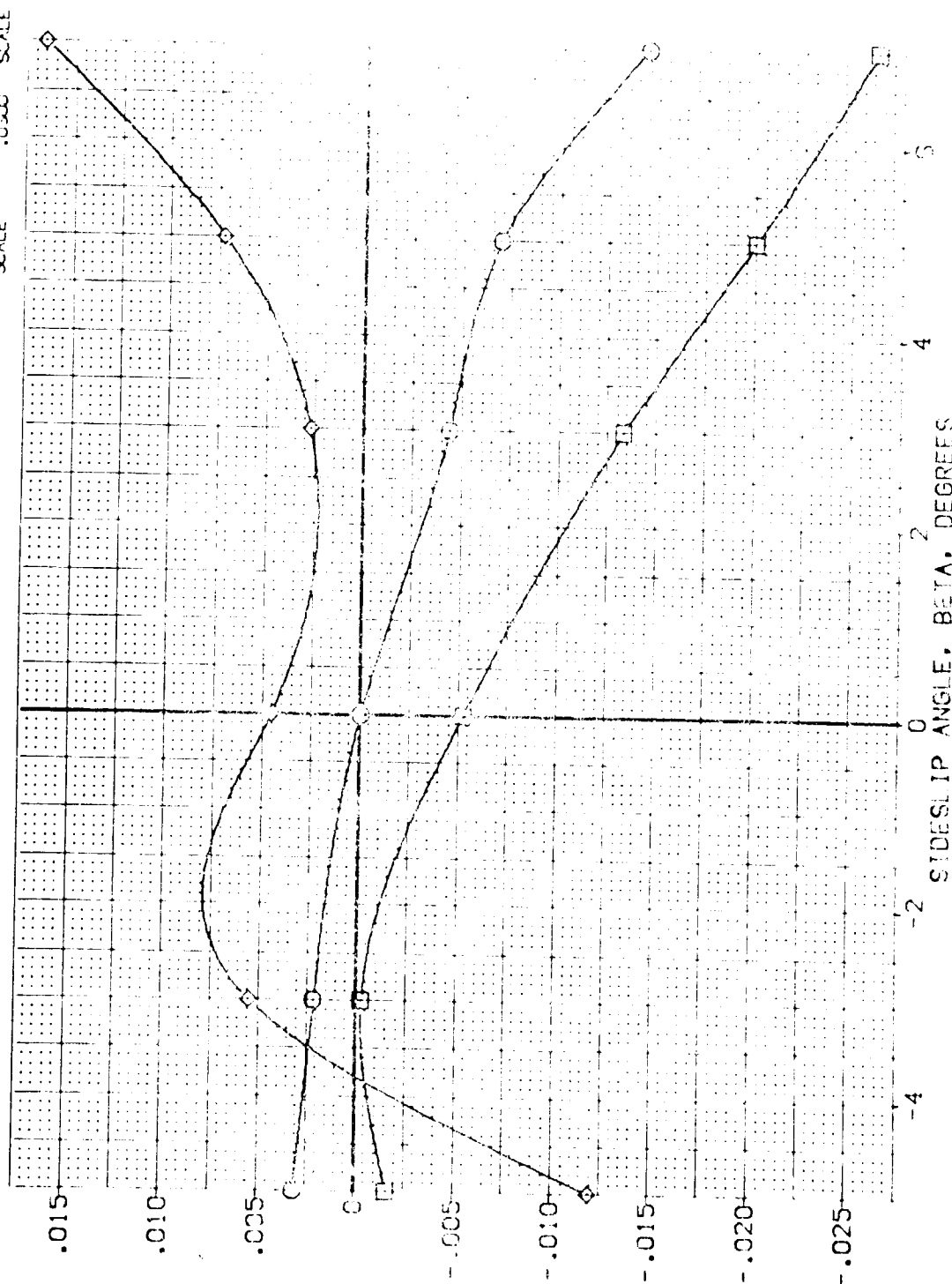


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (B)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

YEAJ22	ARC 11-747	QAS3A B C M F VI V	NH, RV/L	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
YEAJ23	CAS 10, AVAILABLE			0.00	-25.000	-11.700	75.000	SKE 2.4210 52.17
YEAJ34	ARC 11-747	QAS3A B C M F VI V <td>NH, RV/L</td> <td>10.000</td> <td>-25.000</td> <td>-11.700</td> <td>75.000</td> <td>UXE 14.2440</td>	NH, RV/L	10.000	-25.000	-11.700	75.000	UXE 14.2440
				20.000	-25.000	-11.700	75.000	UXE 20.1700
				25.000	-25.000	-11.700	75.000	UXE 32.3200
								UXE 11.5000
								SCALE 11.5000

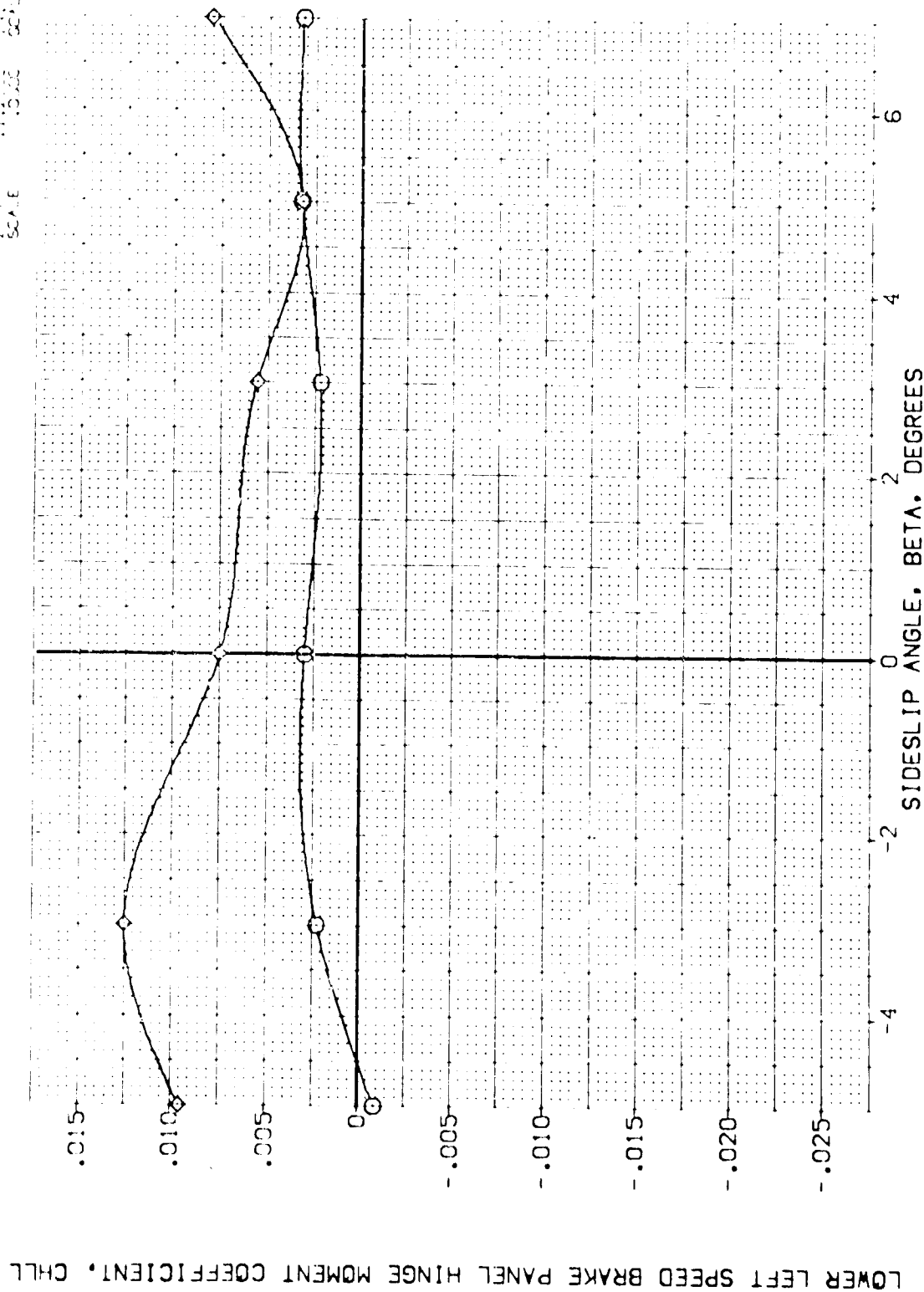


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
(C)MACH = 1.20

DATA SET SYMBOL: [VEJA32] [VEJA33] [VEJA34]  
 CONFIGURATION DESCRIPTION:  
 ARC 11-747 QAS3A E C H F VI V NOM. RV/L  
 DATA NOT AVAILABLE  
 ARC 11-747 QAS3A B C H F VI V NOM. RV/L

ALPHA: .000, 10.000, 20.000  
 RUDDER: -25.000, -25.000, -25.000  
 BDF LAP: -11.700, -11.700, -11.700  
 SPEED BRAKE: 25.000, 25.000, 25.000  
 REFERENCE INFORMATION:  
 SREF: 2.4213 SQ. FT.  
 LREF: 14.2443 IN.  
 BREF: 28.1004 IN.  
 XPRP: 32.5010 IN.  
 YPRP: .0000 IN.  
 ZPRP: 11.2500 IN.  
 SCALE: .0300

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

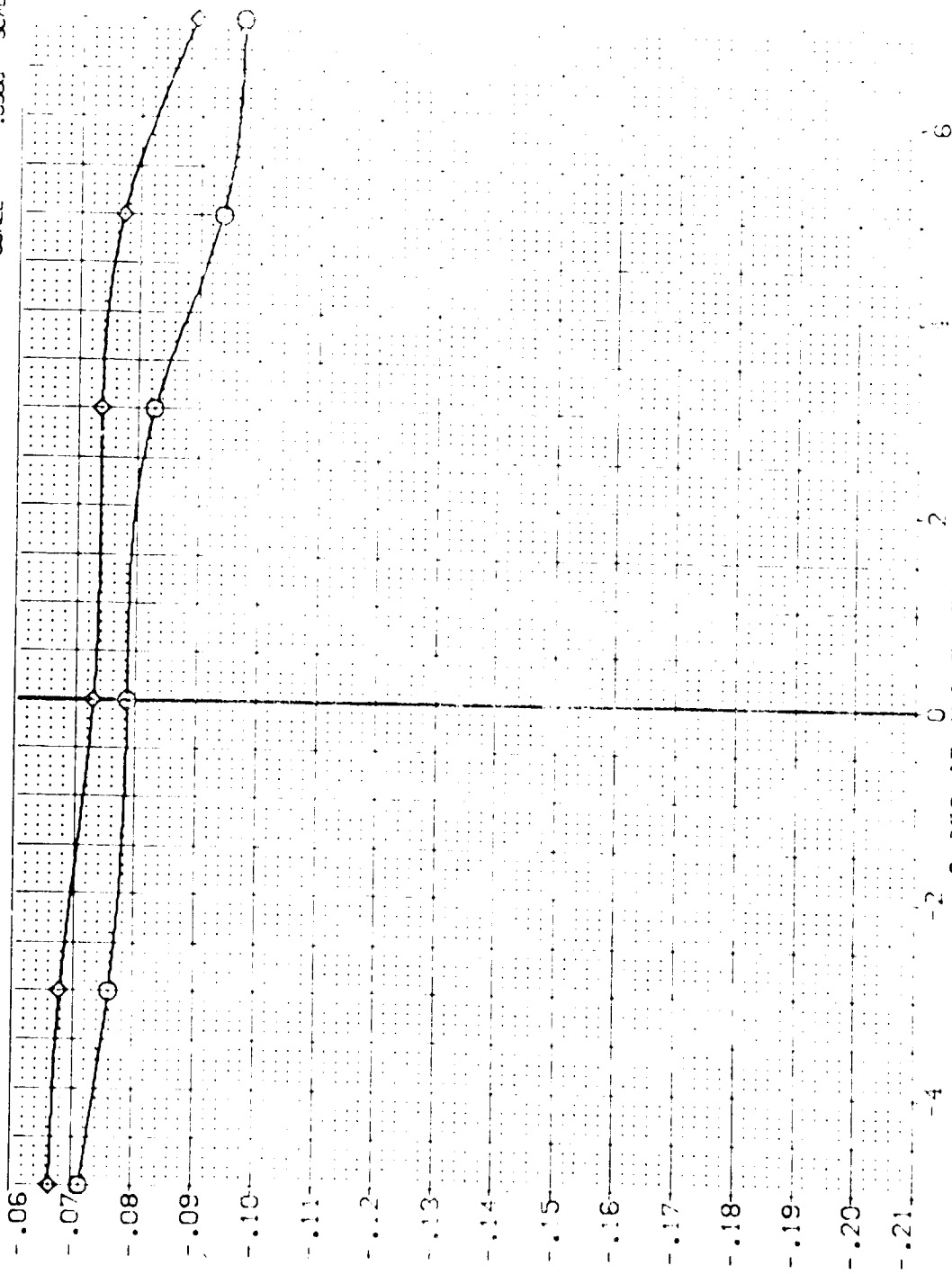


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, SPEED BRAKE = 25 DEG.  
 (A) MAC = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BD/LAP	SPEEDBRK	REFERENCE INFORMATION
(Y-747)	ARC 11-747 GA53A B C M F V	.000	-25.000	-11.700	25.000	SPEED 2.4210 SQ. FT.
(Y-747)	ARC 11-747 GA53A B C M F V	10.000	-25.000	-11.700	25.000	LDREF 14.2440
(Y-747)	ARC 11-747 GA53A B C M F V	20.000	-25.000	-11.700	25.000	BDREF 20.0001
						YREF 32.0000
						YREF 11.0000
						ZREF 11.2500
						SCALE .0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

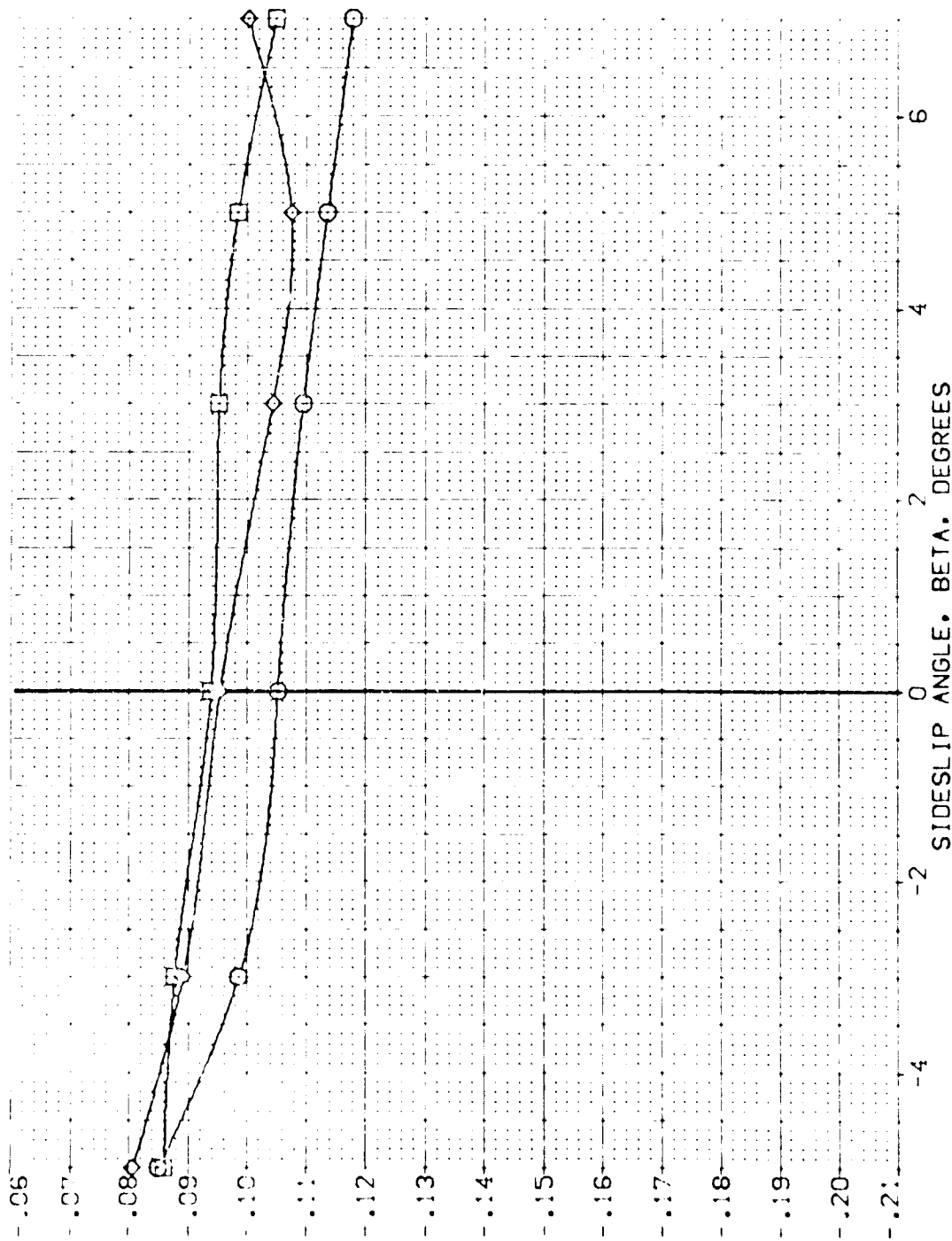


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

(B) MACH = .90

DATA SET SYMB. CONFIGURATION DESCRIPTION  
 (VEJAS3) ARC 11-747 QAS3A B C M F VI V NOM. RVL  
 (VEJAS3) DATA NOT AVAILABLE  
 (VEJAS3) ARC 11-747 QAS3A B C M F VI V NOM. RVL

ALPHA RUDDER BDF LAP SPEED BRK  
 .000 -25.000 -11.700 25.000  
 10.000 -25.000 -11.700 25.000  
 20.000 -25.000 -11.700 25.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1024 IN.  
 XMRD 32.3010 IN.  
 YMRD .0000 IN.  
 ZMRD 11.2500 IN.  
 SCALE .0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

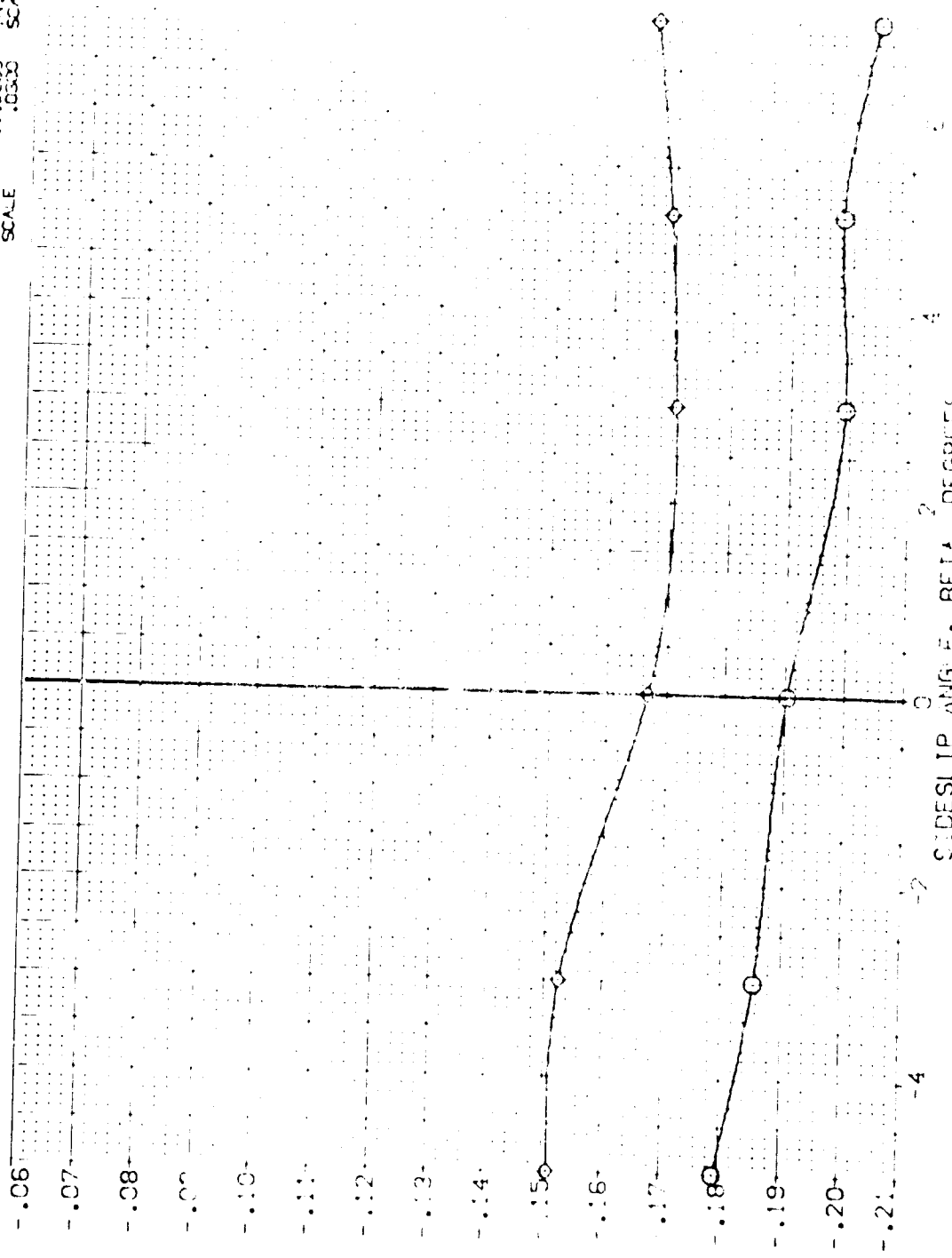


FIG. 47 RUDDER PANEL HINGEMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.  
 (C)MACH = 1.20  
 PAGE : 238



DATA SET SPEED CONFIGURATION DESCRIPTION

ALPHA	RUDDER	BD LAD	SPD	REF	SCALE
0.000	-25.000	11.700	25.000	2.4E10	SCALE
10.000	-25.000	11.700	25.000	1.4E10	SCALE
20.000	-25.000	11.700	25.000	2.4E10	SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CLRL

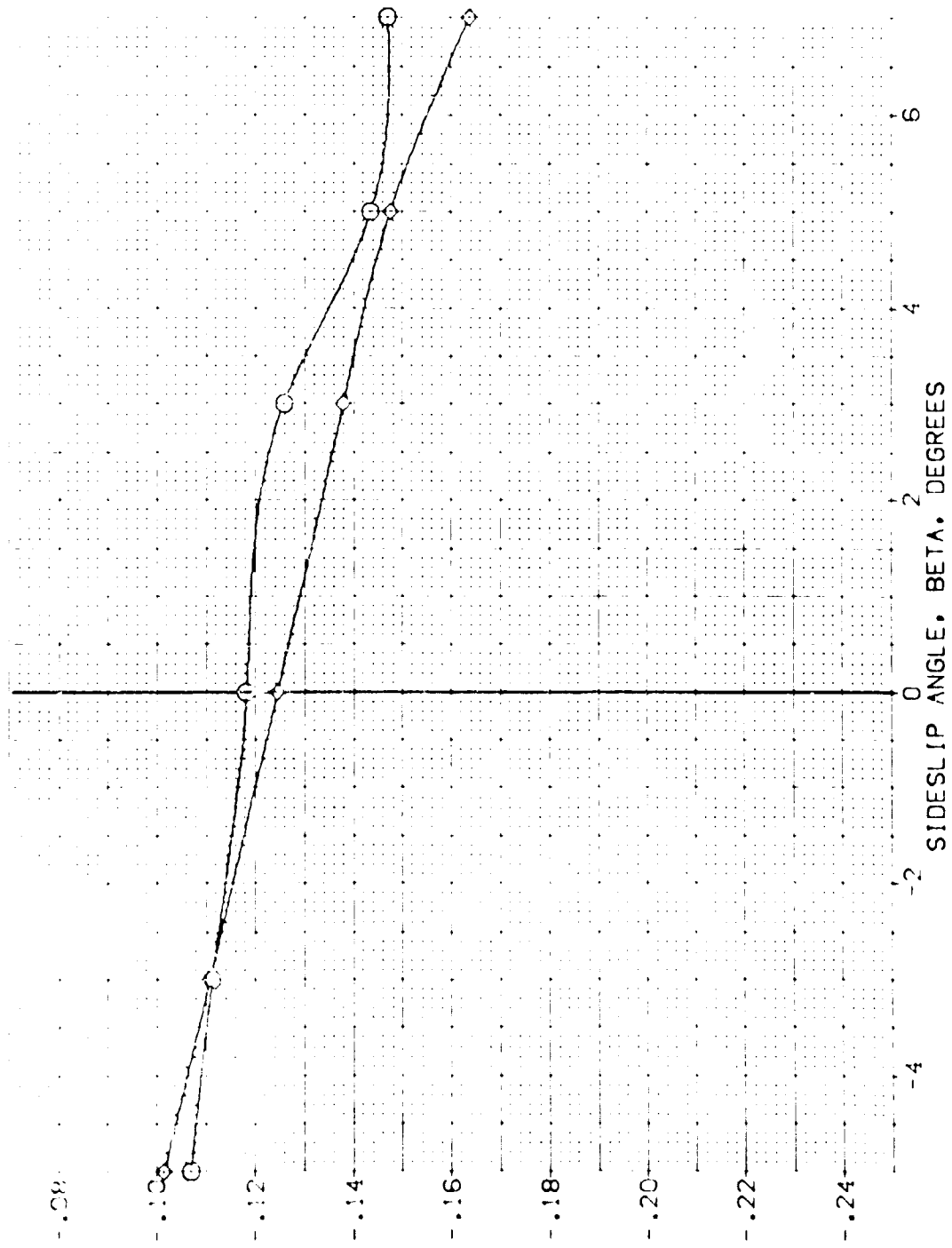


FIG. 47 RUDDER PANEL HINGEMOMENTS VERSUS ANGLE OF ATTACK, SPEEDBRAKE = 25 DEG.

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CLRR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
{VEJA32}	ARC 11-747 CAS3A B C H F VI V	.000	-25.000	-11.700	25.000	SREF 2.4210
{VEJA33}	ARC 11-747 CAS3A B C H F VI V	10.000	-25.000	-11.700	25.000	LINEF 14.2140
{VEJA34}	ARC 11-747 CAS3A B C H F VI V	20.000	-25.000	-11.700	25.000	BRKREF 28.1004
						XYREF 32.0010
						YREF 11.2030
						SCALE .0000

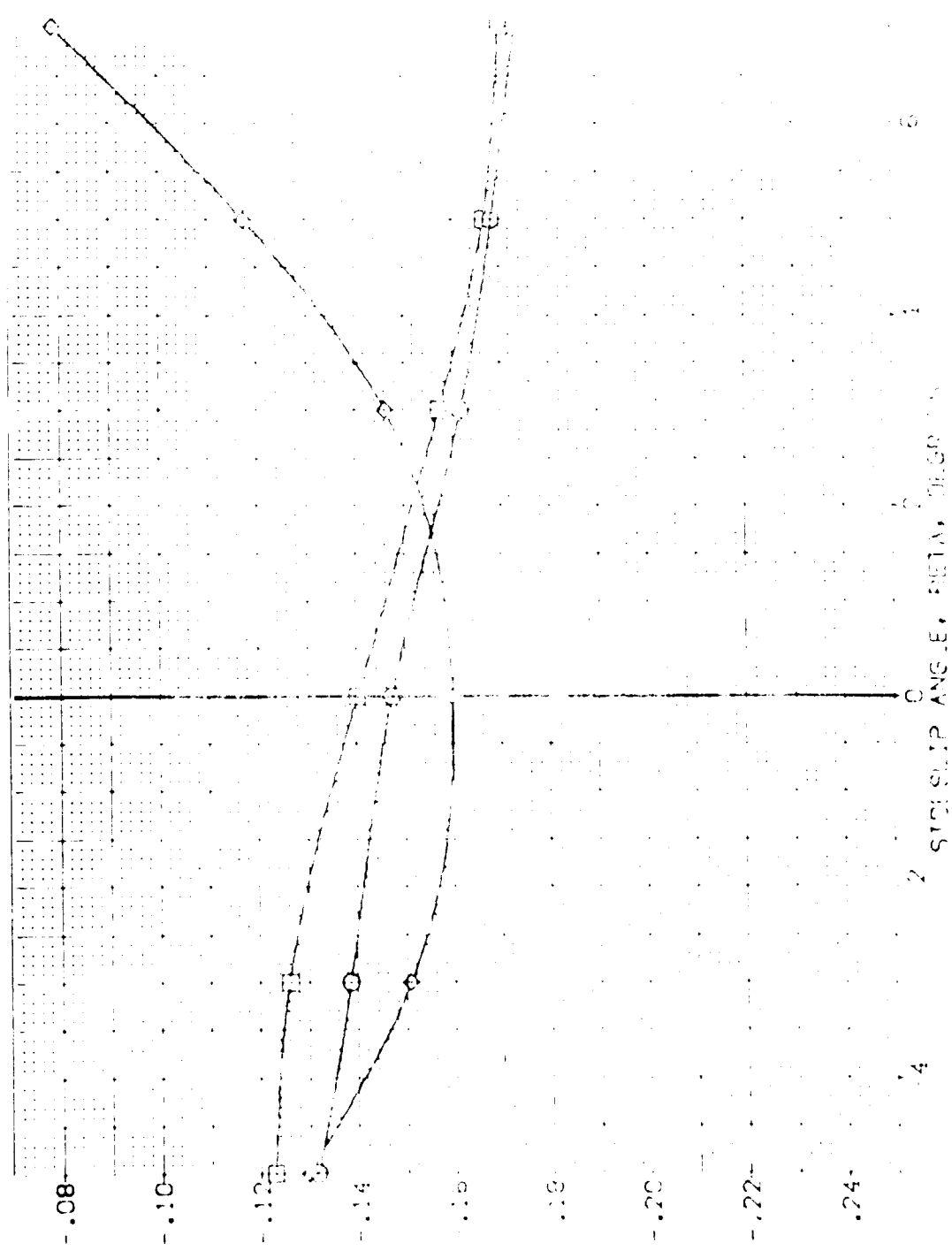


FIG. 47 RUDDER PANEL HINGE MOMENTS VERSUS ANGLE OF ATTACK, COLL. WING = 25 DEG.  
(B)MACH .90 PAGE 1240





ARC 11-747 0A53A B C M F W I V NOM. RN/L (DEJ051)

SYMBOL  
 ○ □ ◇

ALPHA  
 .000  
 10.000  
 20.000

MACH  
 .600  
 .000  
 .000

ELEVON  
 .000  
 .000  
 .000

BD-LAP  
 -11.700  
 .000  
 .000

ELEV-L  
 .000  
 .000  
 .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.F.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XREF 32.3010 IN.  
 YREF 11.2500 IN.  
 ZREF .0300 IN.  
 SCALE

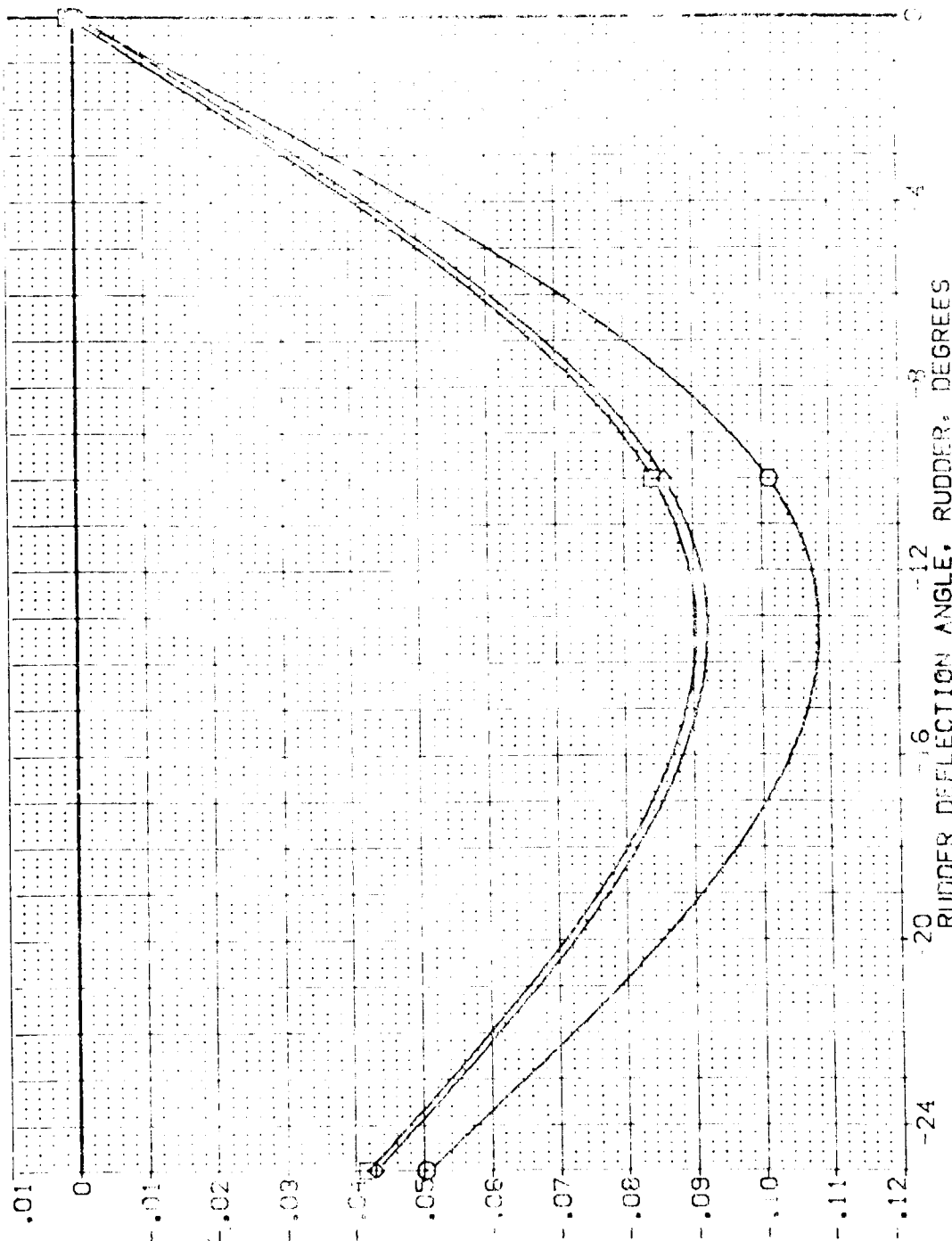


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

ARC 11-14-50 03A B C M F W V NOM. RN/L (06J051)

SYMBOL	PARAMETRIC VALUES		REFERENCE INFORMATION	
	ALPHA	WASH	SPEED	SCALE
0100	.000	.000	2.4210	50.11
0100	.000	.000	14.0410	10.00
0100	.000	.000	20.0004	10.00
0100	.000	.000	32.0010	10.00
0100	.000	.000	40.0010	10.00
0100	.000	.000	50.0010	10.00
0100	.000	.000	60.0010	10.00
0100	.000	.000	70.0010	10.00
0100	.000	.000	80.0010	10.00
0100	.000	.000	90.0010	10.00
0100	.000	.000	100.0010	10.00
0100	.000	.000	110.0010	10.00
0100	.000	.000	120.0010	10.00
0100	.000	.000	130.0010	10.00
0100	.000	.000	140.0010	10.00
0100	.000	.000	150.0010	10.00
0100	.000	.000	160.0010	10.00
0100	.000	.000	170.0010	10.00
0100	.000	.000	180.0010	10.00
0100	.000	.000	190.0010	10.00
0100	.000	.000	200.0010	10.00
0100	.000	.000	210.0010	10.00
0100	.000	.000	220.0010	10.00
0100	.000	.000	230.0010	10.00
0100	.000	.000	240.0010	10.00
0100	.000	.000	250.0010	10.00
0100	.000	.000	260.0010	10.00
0100	.000	.000	270.0010	10.00
0100	.000	.000	280.0010	10.00
0100	.000	.000	290.0010	10.00
0100	.000	.000	300.0010	10.00
0100	.000	.000	310.0010	10.00
0100	.000	.000	320.0010	10.00
0100	.000	.000	330.0010	10.00
0100	.000	.000	340.0010	10.00
0100	.000	.000	350.0010	10.00
0100	.000	.000	360.0010	10.00
0100	.000	.000	370.0010	10.00
0100	.000	.000	380.0010	10.00
0100	.000	.000	390.0010	10.00
0100	.000	.000	400.0010	10.00
0100	.000	.000	410.0010	10.00
0100	.000	.000	420.0010	10.00
0100	.000	.000	430.0010	10.00
0100	.000	.000	440.0010	10.00
0100	.000	.000	450.0010	10.00
0100	.000	.000	460.0010	10.00
0100	.000	.000	470.0010	10.00
0100	.000	.000	480.0010	10.00
0100	.000	.000	490.0010	10.00
0100	.000	.000	500.0010	10.00
0100	.000	.000	510.0010	10.00
0100	.000	.000	520.0010	10.00
0100	.000	.000	530.0010	10.00
0100	.000	.000	540.0010	10.00
0100	.000	.000	550.0010	10.00
0100	.000	.000	560.0010	10.00
0100	.000	.000	570.0010	10.00
0100	.000	.000	580.0010	10.00
0100	.000	.000	590.0010	10.00
0100	.000	.000	600.0010	10.00
0100	.000	.000	610.0010	10.00
0100	.000	.000	620.0010	10.00
0100	.000	.000	630.0010	10.00
0100	.000	.000	640.0010	10.00
0100	.000	.000	650.0010	10.00
0100	.000	.000	660.0010	10.00
0100	.000	.000	670.0010	10.00
0100	.000	.000	680.0010	10.00
0100	.000	.000	690.0010	10.00
0100	.000	.000	700.0010	10.00
0100	.000	.000	710.0010	10.00
0100	.000	.000	720.0010	10.00
0100	.000	.000	730.0010	10.00
0100	.000	.000	740.0010	10.00
0100	.000	.000	750.0010	10.00
0100	.000	.000	760.0010	10.00
0100	.000	.000	770.0010	10.00
0100	.000	.000	780.0010	10.00
0100	.000	.000	790.0010	10.00
0100	.000	.000	800.0010	10.00
0100	.000	.000	810.0010	10.00
0100	.000	.000	820.0010	10.00
0100	.000	.000	830.0010	10.00
0100	.000	.000	840.0010	10.00
0100	.000	.000	850.0010	10.00
0100	.000	.000	860.0010	10.00
0100	.000	.000	870.0010	10.00
0100	.000	.000	880.0010	10.00
0100	.000	.000	890.0010	10.00
0100	.000	.000	900.0010	10.00
0100	.000	.000	910.0010	10.00
0100	.000	.000	920.0010	10.00
0100	.000	.000	930.0010	10.00
0100	.000	.000	940.0010	10.00
0100	.000	.000	950.0010	10.00
0100	.000	.000	960.0010	10.00
0100	.000	.000	970.0010	10.00
0100	.000	.000	980.0010	10.00
0100	.000	.000	990.0010	10.00
0100	.000	.000	1000.0010	10.00

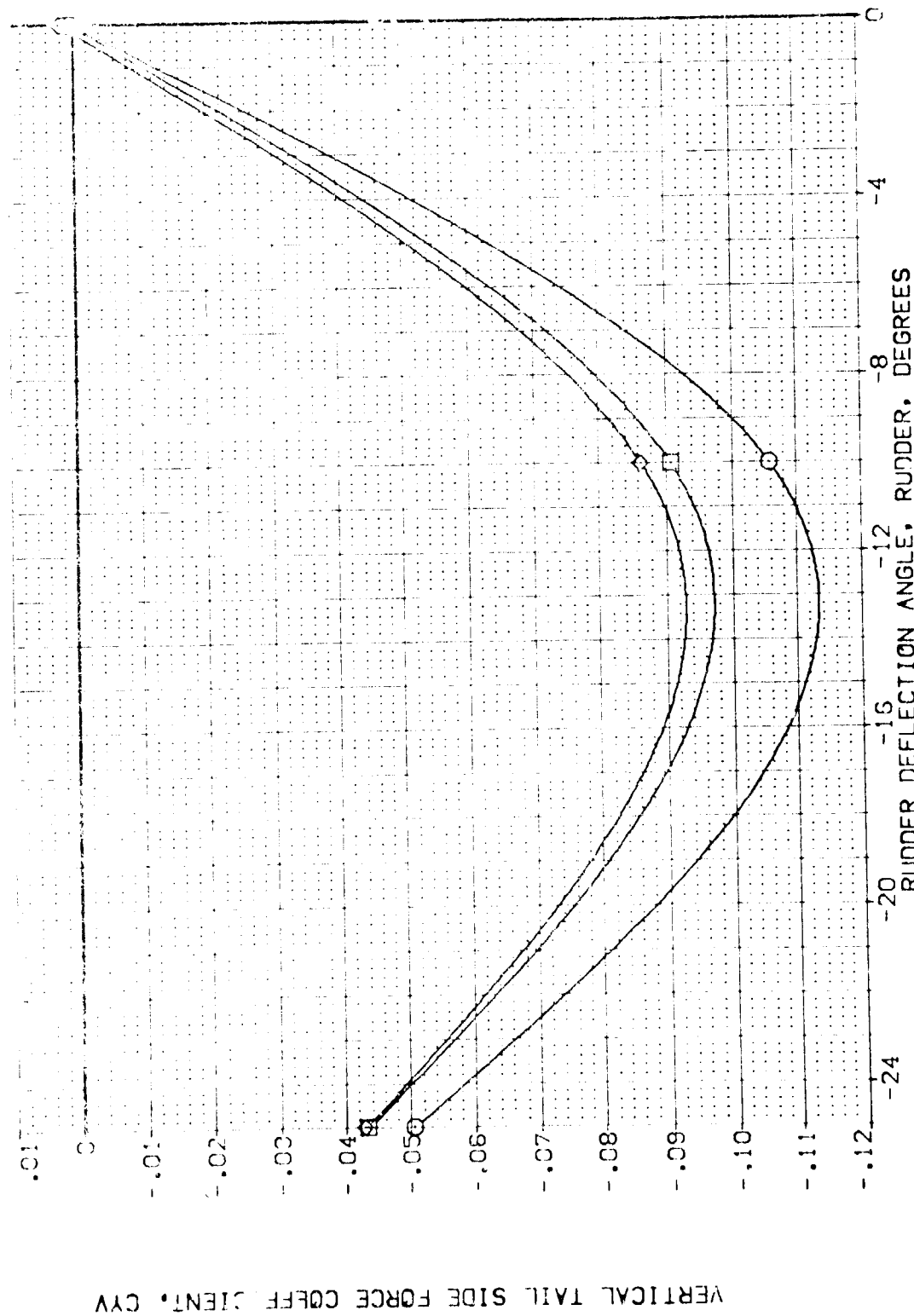


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES  
PAGE 1243

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ051)

SYMBOL  
 ○ □ ◇

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .900  
 ELEVON .000  
 BDFLAP -11.700  
 ELEV-L .000

BETA .000  
 AILRON .000  
 SPEEDK 55.000  
 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210  
 LREF 14.2440  
 BREF 23.1004  
 VREF 32.3010  
 WREF 11.2650  
 SCALE .0330

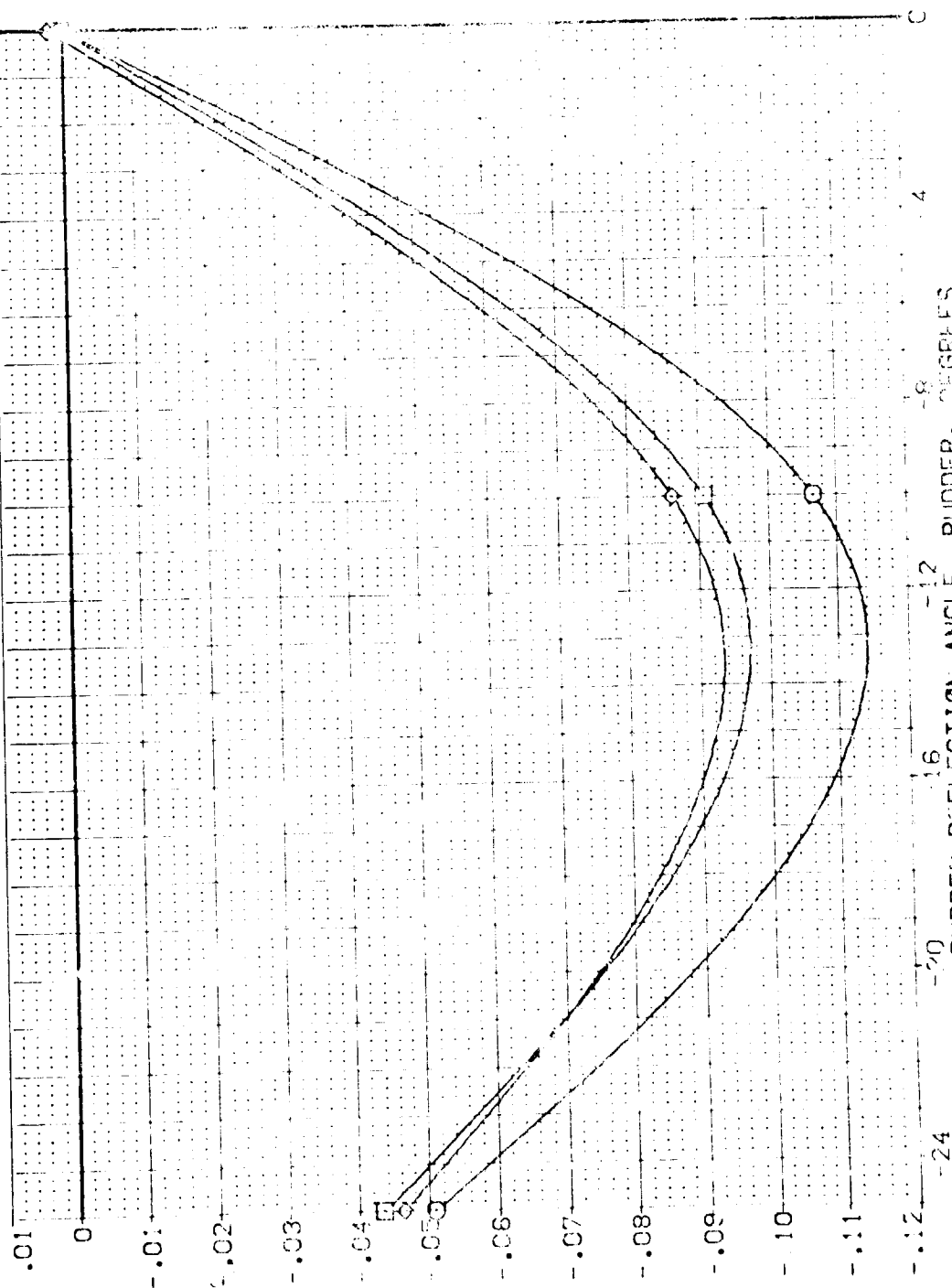


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE : 55 DEGREES  
 PAGE 1244



ARC 11-11 0-53A T C M F W1 V NOM. RN/L (DEJ051)

PARAMETRIC VALUES		REFERENCE INFORMATION	
ALPHA	WAO	SCALE	SCALE
.000	1.050	2.4210	2.4210
10.000	ELEVON	14.7240	14.7240
20.000	ELEVON	20.0000	20.0000
	ELEVON	30.0000	30.0000
	ELEVON	40.0000	40.0000
	ELEVON	50.0000	50.0000
	ELEVON	60.0000	60.0000
	ELEVON	70.0000	70.0000
	ELEVON	80.0000	80.0000
	ELEVON	90.0000	90.0000
	ELEVON	100.0000	100.0000
	ELEVON	110.0000	110.0000
	ELEVON	120.0000	120.0000
	ELEVON	130.0000	130.0000
	ELEVON	140.0000	140.0000
	ELEVON	150.0000	150.0000
	ELEVON	160.0000	160.0000
	ELEVON	170.0000	170.0000
	ELEVON	180.0000	180.0000
	ELEVON	190.0000	190.0000
	ELEVON	200.0000	200.0000

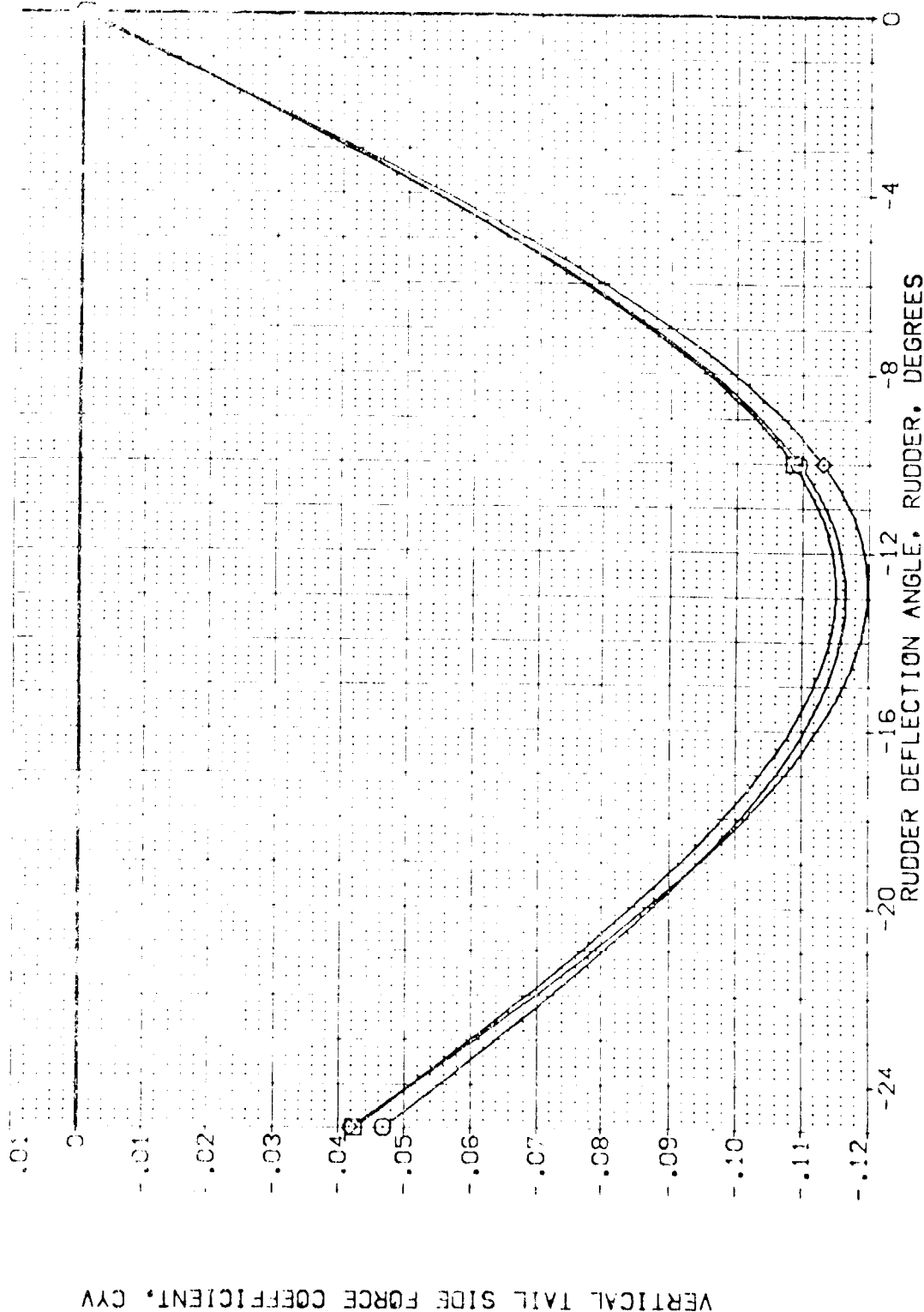


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ051)

SYMBOL  
☐ ☐ ☐

ALPHA  
 .000  
 10.000  
 20.000

MACH  
 1.200  
 ELEVON  
 BOFLAP  
 ELEV-L

PARAMETRIC VALUES  
 BETA  
 AILRON  
 SPO3RK  
 ELEV-R

.000  
 .000  
 56.000  
 .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XREF 32.2010 IN.  
 YREF 11.7500 IN.  
 ZREF .0000 IN.  
 SCALE .0000

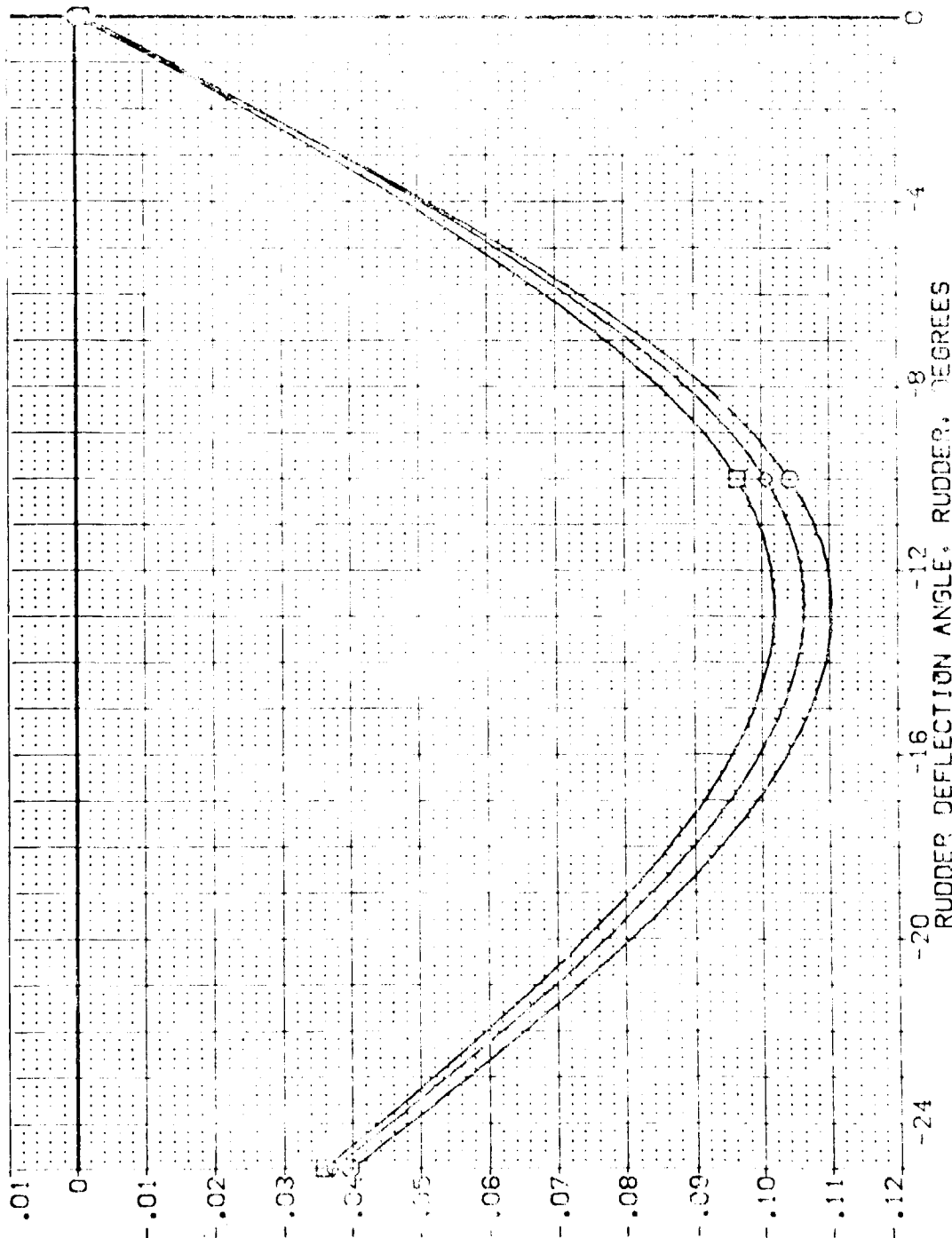


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

(1907-10)

5

PARAMETRIC VALUES	W.C.	W.C.	W.C.
1.000	1.000	1.000	1.000
10.000	10.000	10.000	10.000
20.000	20.000	20.000	20.000
30.000	30.000	30.000	30.000
40.000	40.000	40.000	40.000
50.000	50.000	50.000	50.000
60.000	60.000	60.000	60.000
70.000	70.000	70.000	70.000
80.000	80.000	80.000	80.000
90.000	90.000	90.000	90.000
100.000	100.000	100.000	100.000

REFERENCE INFORMATION	
SP#	2,4210
LEV	14,240
YR	20,004
QTR	30,000000
WEEK	11,000000
SO#	50,000000

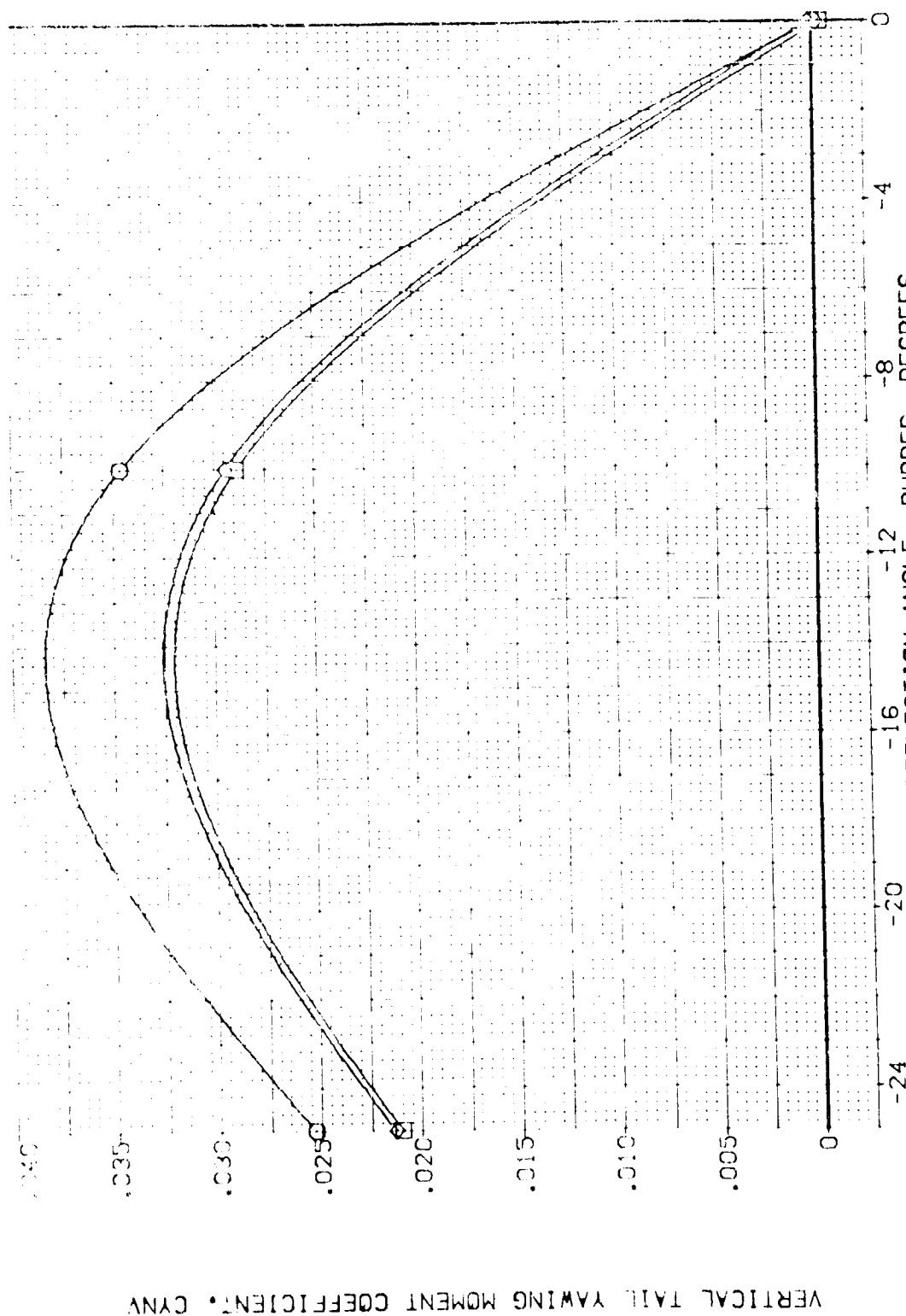


FIG. 48. EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ051)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	REFERENCE INFORMATION
○	.000	.800	BETA .000	SREF 2.4210 SQ.FT.
□	10.000	ELEVON .000	AILRON .000	LREF 14.2440 IN.
◇	20.000	90FLAP -11.700	SPODRK 55.000	BREF 28.1004 IN.
		ELEV-L .000	ELEV-R .000	XMRP 32.3010 IN.
				YMRP .0000 IN.
				ZMRP 11.2500 IN.
				SCALE .0300

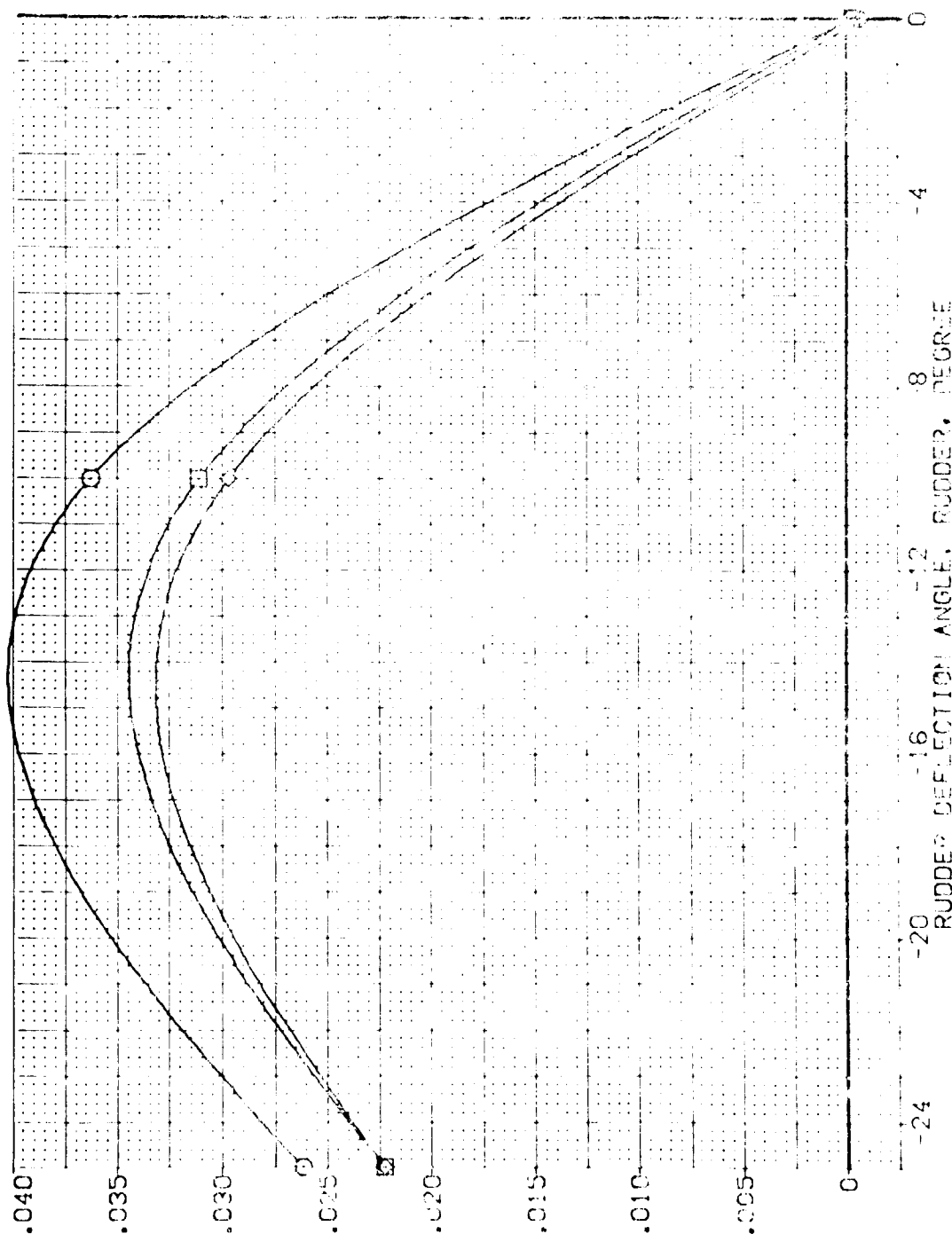


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

ARC 11-13 CAS3: C M F W I V NOM. RN/L (DEJ051)

10.05

ALPACA  
10.000  
10.000  
10.000

PARAMETRIC VALUES	
MAC	.800 RE
SLIP	.000 ALPH
DRIFT	11.0 SPDR
ELEV	.000 ELEV

PARAMETRIC VALUES
RE-
900
100
ALLRO-
900
ELEV-
100

55.000.000

55.000.000

55.000.000

55.000.000

55.000.000

55.000.000

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

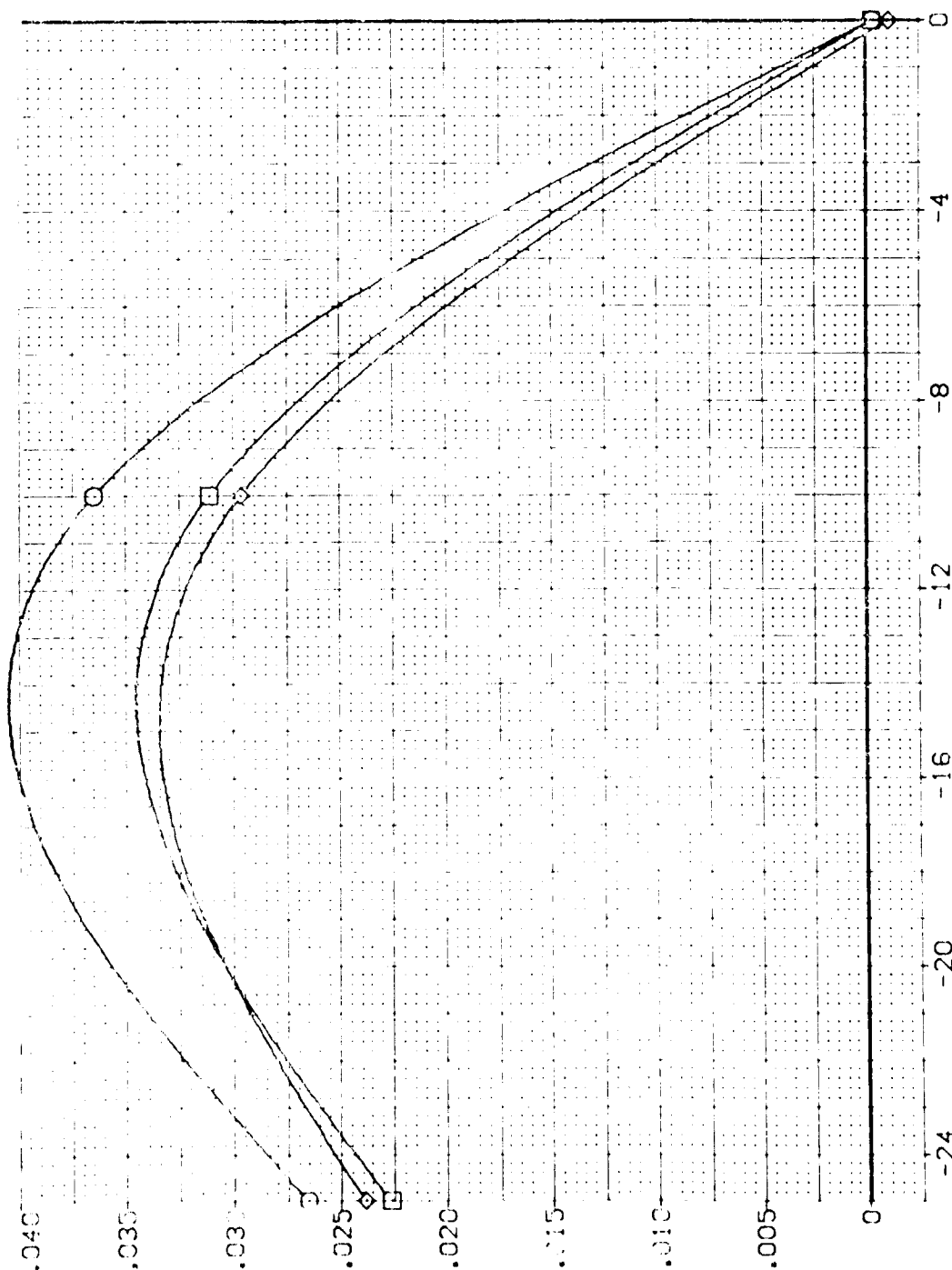
REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SRFF	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WMPD	11.2500	IN.
SCALE	.0300	SCALE

REFERENCE INFORMATION		SO. FT.
SAFE	2.4210	IN.
LBFF	14.2440	IN.
BOFF	28.1004	IN.
BOXP	32.3010	IN.
YMPD	.0000	IN.
WZPD	11.2500	IN.
SCALE	.0300	SCALE



0 -16 -12 -8  
RUDDER DEFLECTION ANGLE, DEGREES. RUDDER DEFLECTION ANGLE, DEGREES

FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (DEJ051)

SYMBOL	PARAMETRIC VALUES				REFERENCE INFORMATION			
	ALPHA	MACH	BETA	SCALE	SREF	LREF	BREF	SCALE
○	.000	1.050	.000	.000	2.4210	14.2440	28.1004	50. FT.
□	10.000	.000	AIR-ON	.000	11.0000	32.0010	11.0000	11.0000
◇	20.000	-11.700	SPEED-BK	55.000	11.0000	11.0000	11.0000	11.0000
		ELEV-L	ELEV-R	.000				

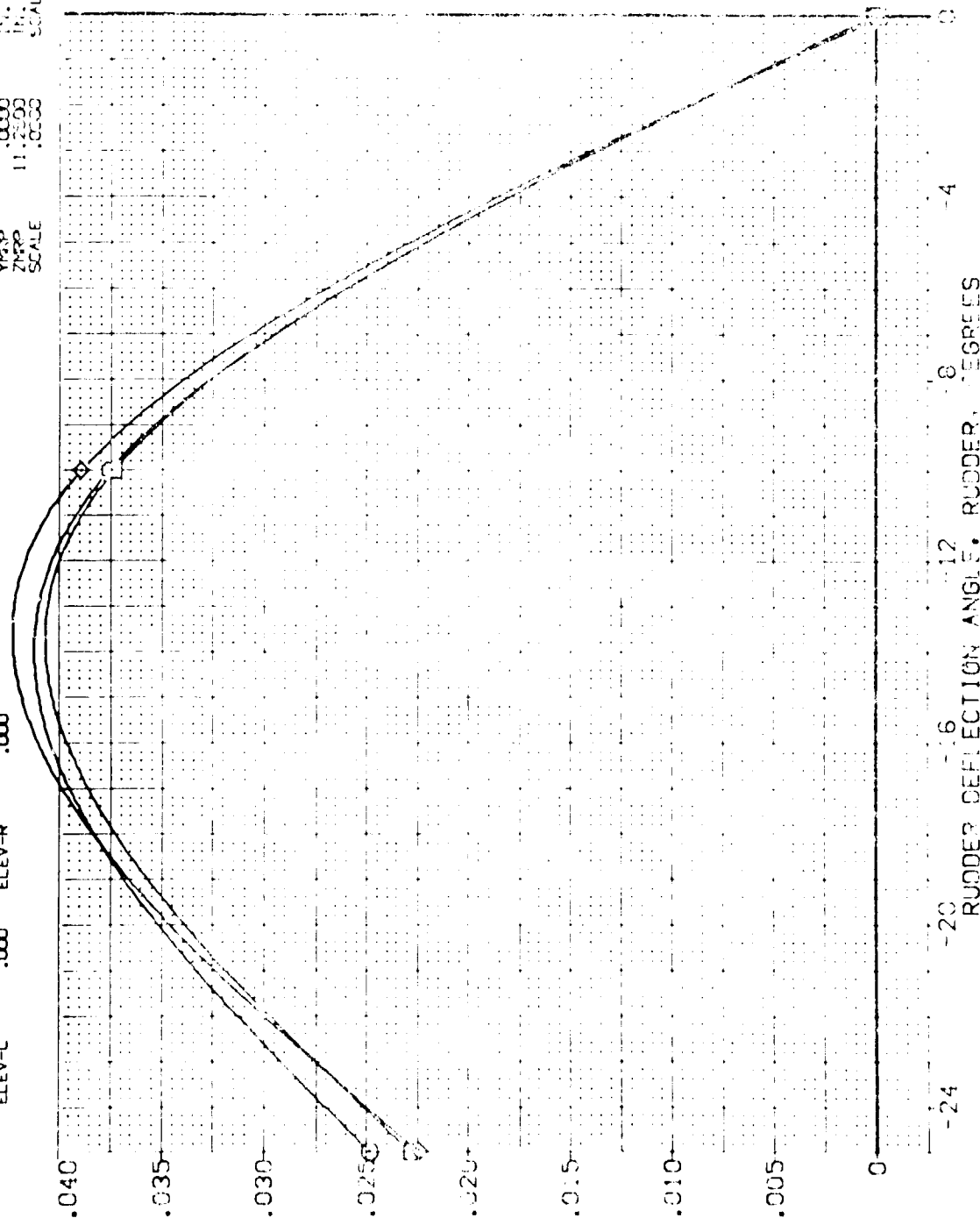


FIG. 48 EFFECT OF RUDDER DEFLECTION ON VERTICAL TAIL, SPEEDBRAKE = 55 DEGREES



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL	ALF A	PARAMETRIC VALUES				REFERENCE INFORMATION			
		MACH	BETA	AILRON	ELEV-R	SREF	LREF	BREF	SCALE
□	.000	.000	.000	.000	.000	2.4210	14.2440	28.1004	50. FT.
□	10.000	ELEVON	.000	AILRON	.000	11.2500	32.3010	.0000	
□	20.000	BOFLAP	-11.700	SPOBRK	55.000	11.2500	32.3010	.0000	
◇		ELEV-L	.000	ELEV-R	.000	11.2500	32.3010	.0000	
						11.2500	32.3010	.0000	SCALE

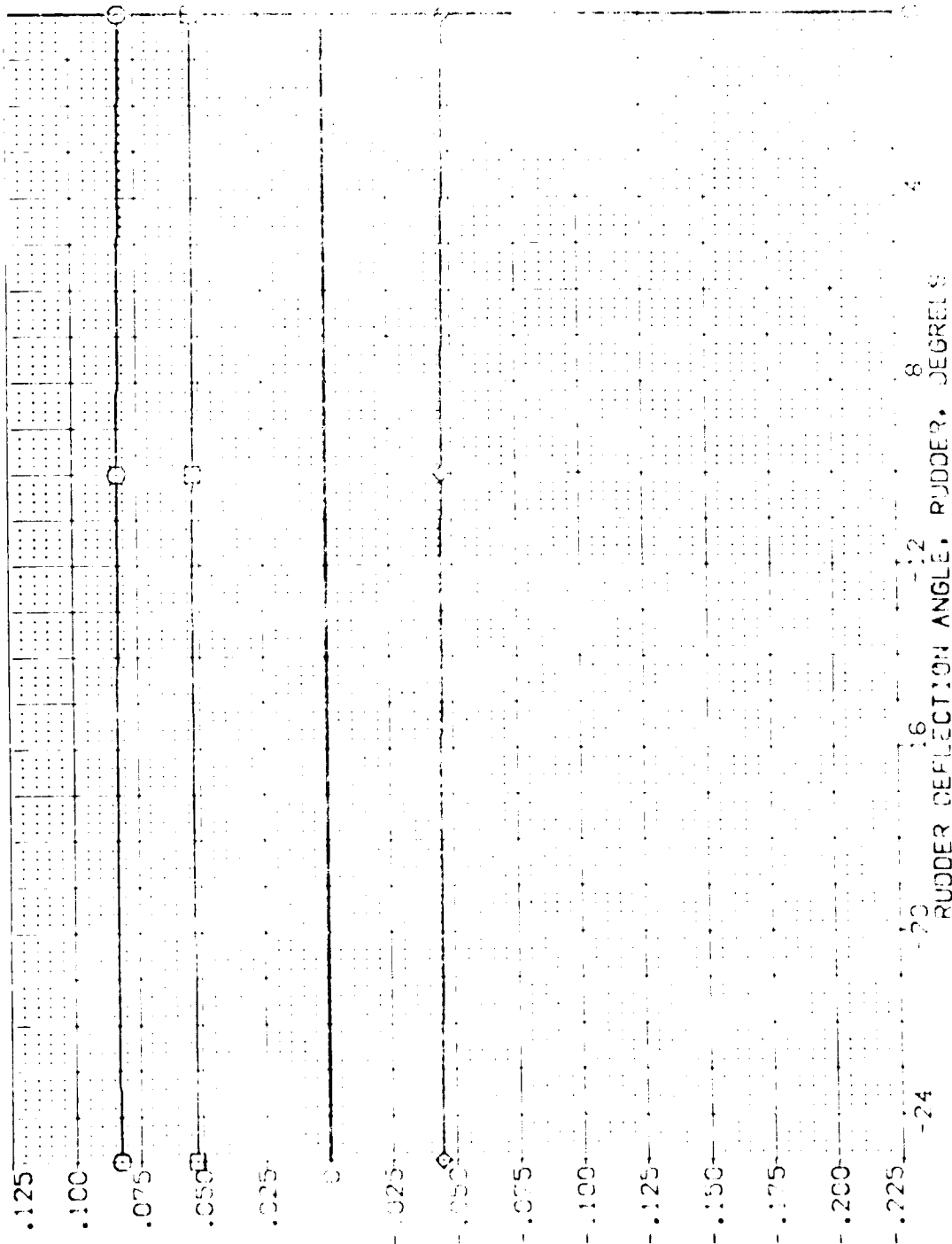


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG



(EEJOS)

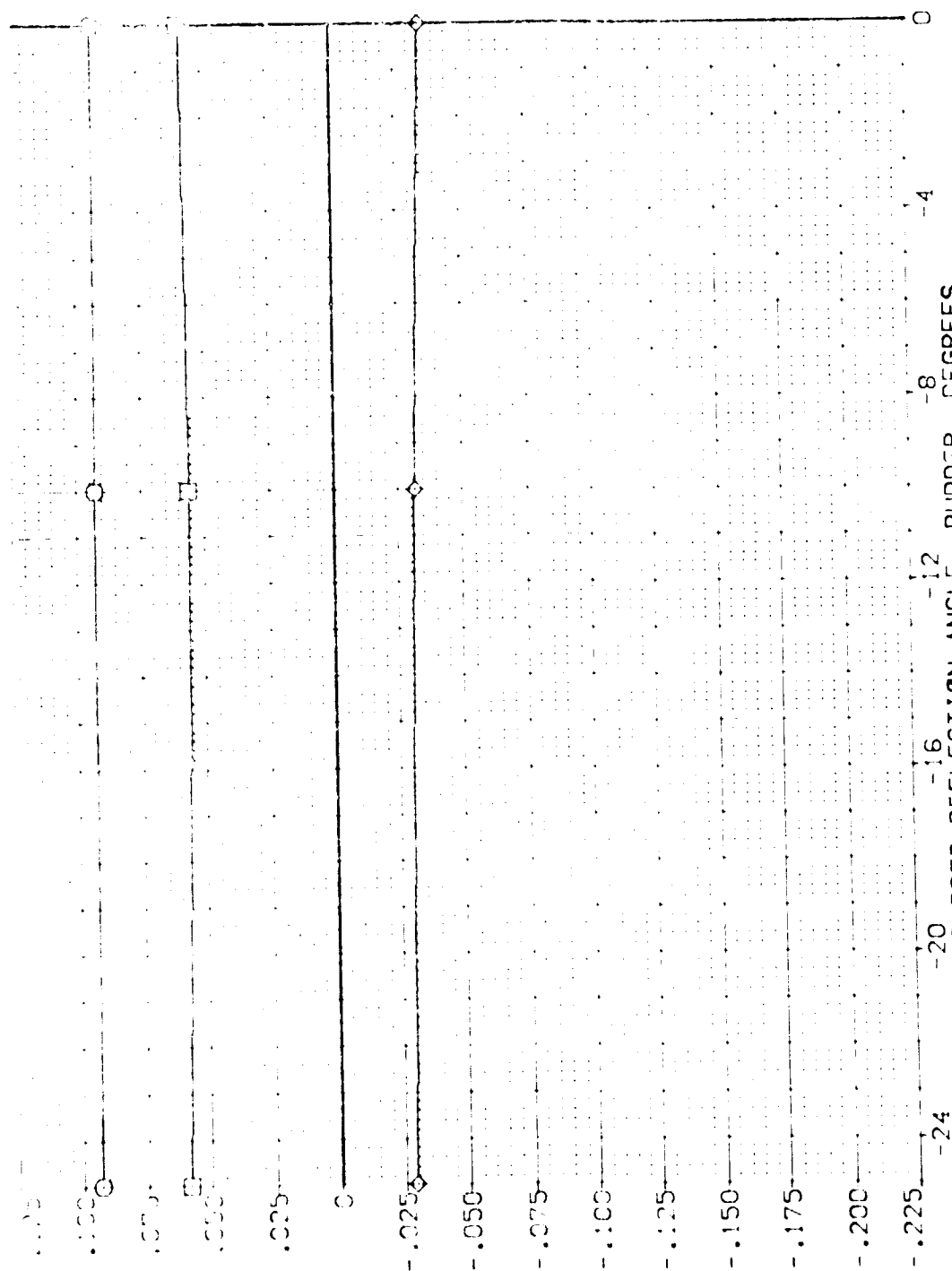
REFERENCE INFORMATION	STATUS
2-4210	1-1-60
14-2740	1-1-60
28-1004	1-1-60
30-2010	1-1-60
31-0000	1-1-60
11-0000	1-1-60
1-0000	1-1-60

500

[illegible]

100

TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET



0 -16 -12 -8 RUDDER DEFLECTION ANGLE, DEGREES

FIG. 49 EFFECT OF BUDGER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL	ALPHA	PARAMETRIC VALUES				REFERENCE INFORMATION			
		MACH	BETA	AILRON	ELEV-R	SREF	LRFF	SCAL	SCALE
□	.000	.500	.000	.000	.000	2.4210	14.2440	1.000	1.000
□	10.000	.000	.000	.000	.000	14.2440	20.000	1.000	1.000
◇	20.000	-11.700	.000	.000	.000	32.5010	11.2500	1.000	1.000

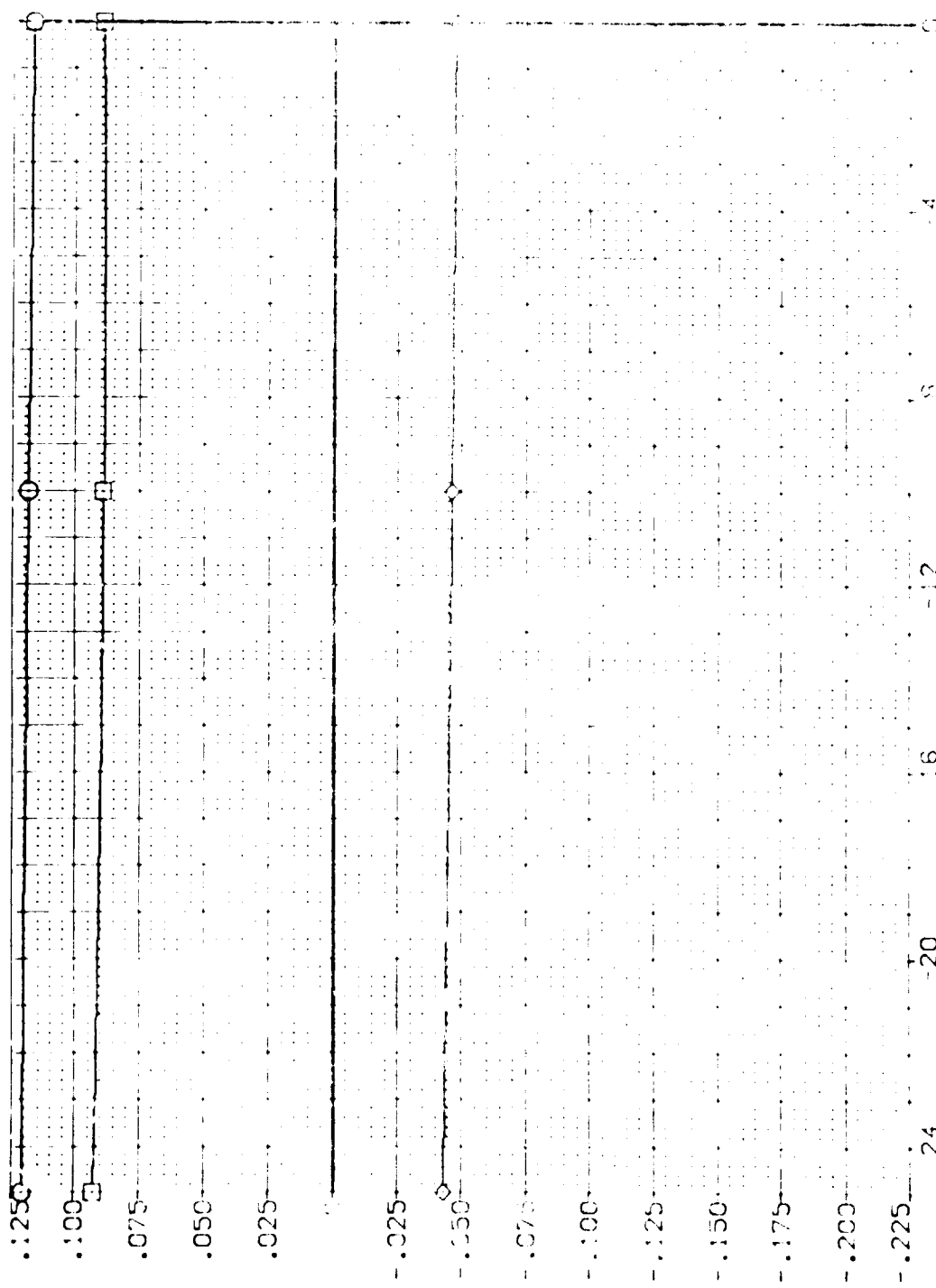


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEED OF RAKE = 55 DEG

ARC 11-747 0A53A B C M F W I V NOM. RN/L (EEJ051)

SYMBOL		PARAMETRIC VALUES				REFERENCE INFORMATION			
○	ALPHA	MACH	BETA	REF	REF	SREF	REF	REF	REF
○	10.000	ELEV-R	1.150	0.000	14.2440	14.2440	14.2440	14.2440	14.2440
○	20.000	ELEV-L	0.000	0.000	28.1004	28.1004	28.1004	28.1004	28.1004
					32.2010	32.2010	32.2010	32.2010	32.2010
					11.2000	11.2000	11.2000	11.2000	11.2000
					SCALE	SCALE	SCALE	SCALE	SCALE

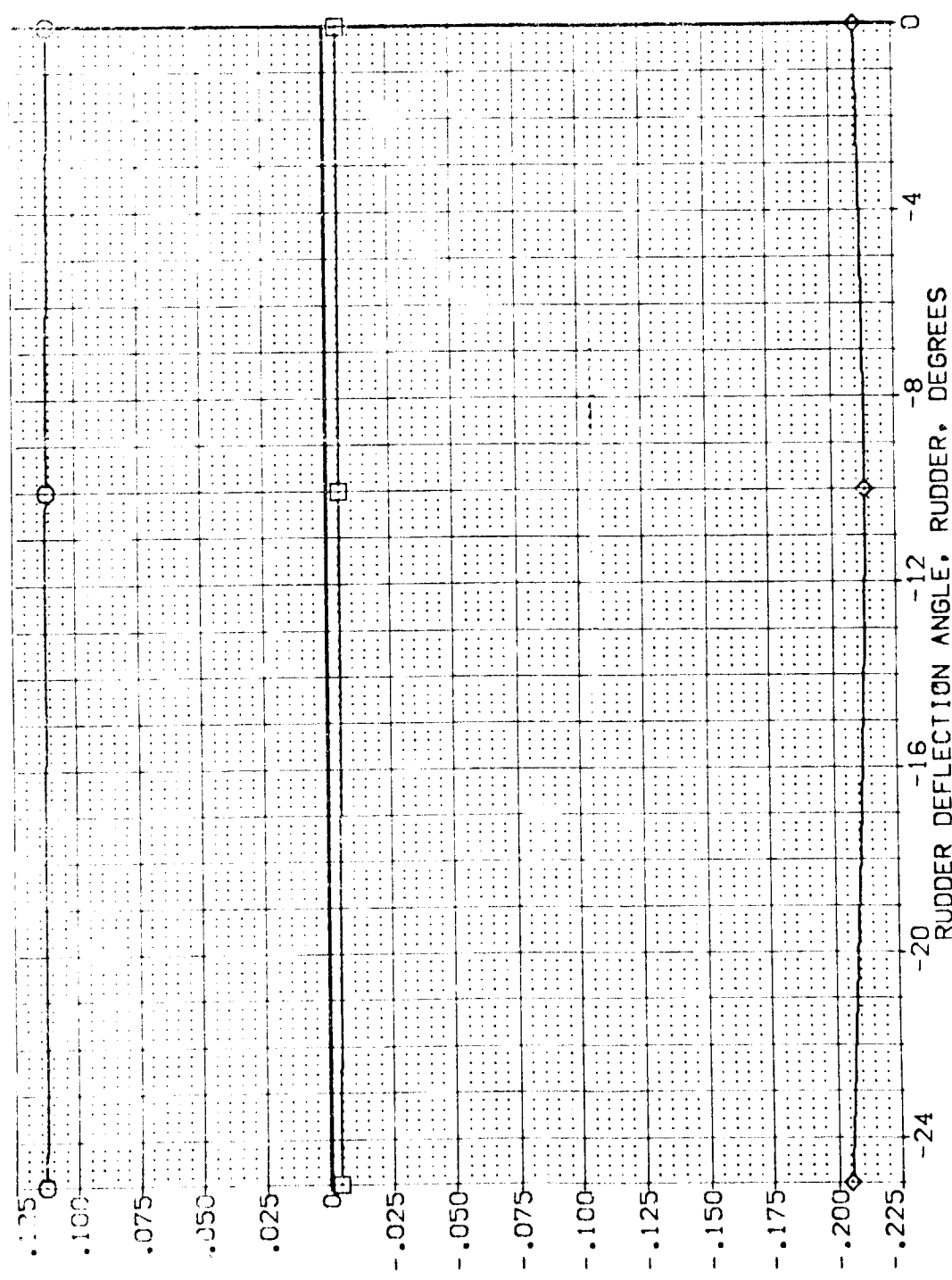


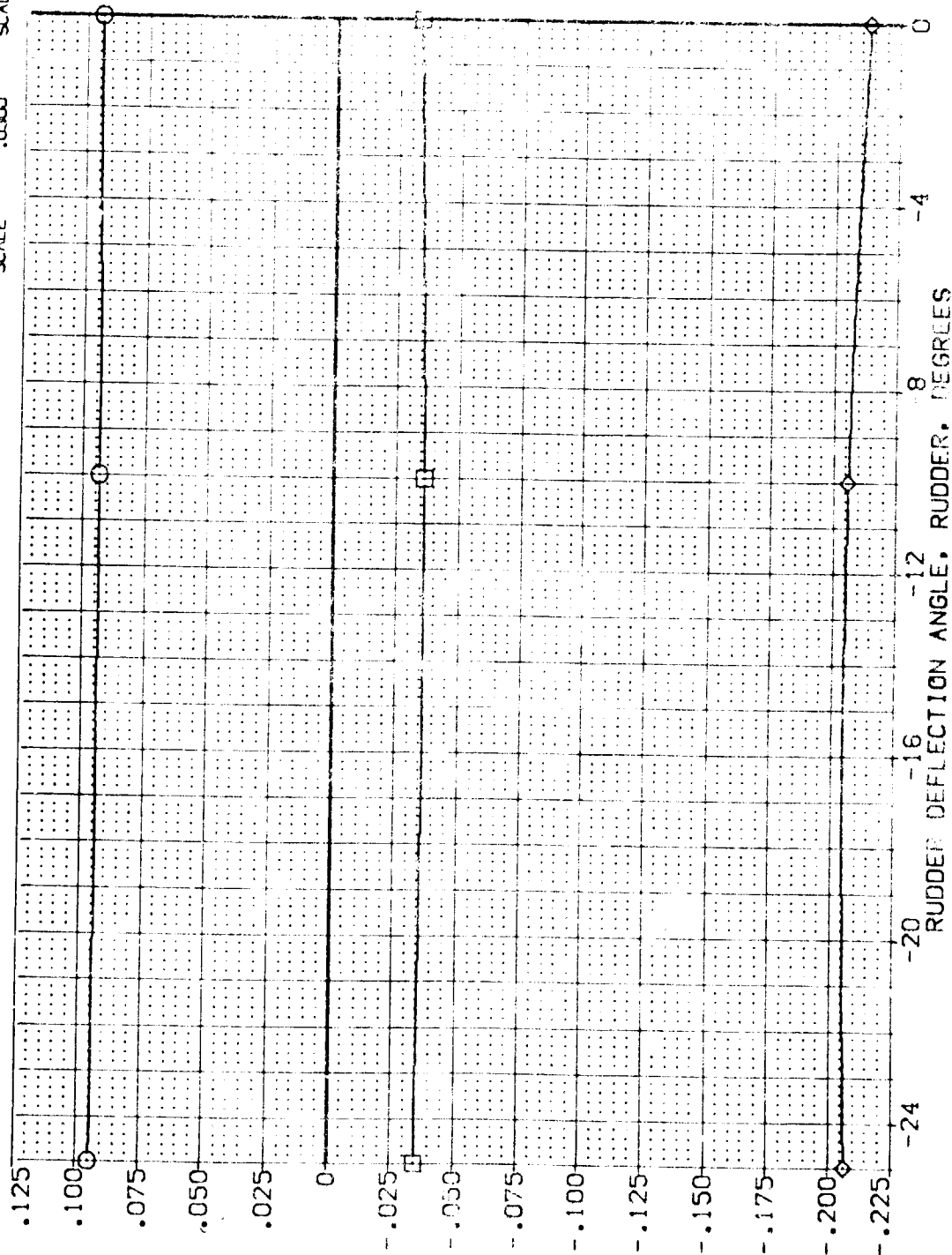
FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG PAGE 1255

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
 ○ □ ◇

PARAMETRIC VALUES  
 MACH 1.200 BETA .000  
 ELEVON .000 AILRON .000  
 BDFLAP -11.700 SPEEDBRK 55.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 20.1004 IN.  
 XREF 32.3010 IN.  
 YREF .0000 IN.  
 ZREF 11.2500 IN.  
 SCALE .0000



TOTAL ELEVON HINGE MOMENT COEFFICIENT, CHET

FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 55 DEG



ARC 11-747 GAS3A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL	ALPHA	MACH	PARAMETRIC VALUES	REFERENCE INFORMATION
○	.000	ELEVON	.600 BE A	SRF 2.4210
□	10.000	ELEVON	.000 ALRON	USEE 14.2140
◇	20.000	ELEVON	-11.750 SPOOK	EXPE 28.1004
		ELEV-L	.000 ELEV-R	YMRP 32.9010
				YMRP .0000
				ZMRP 11.2000
				SCALE .0000

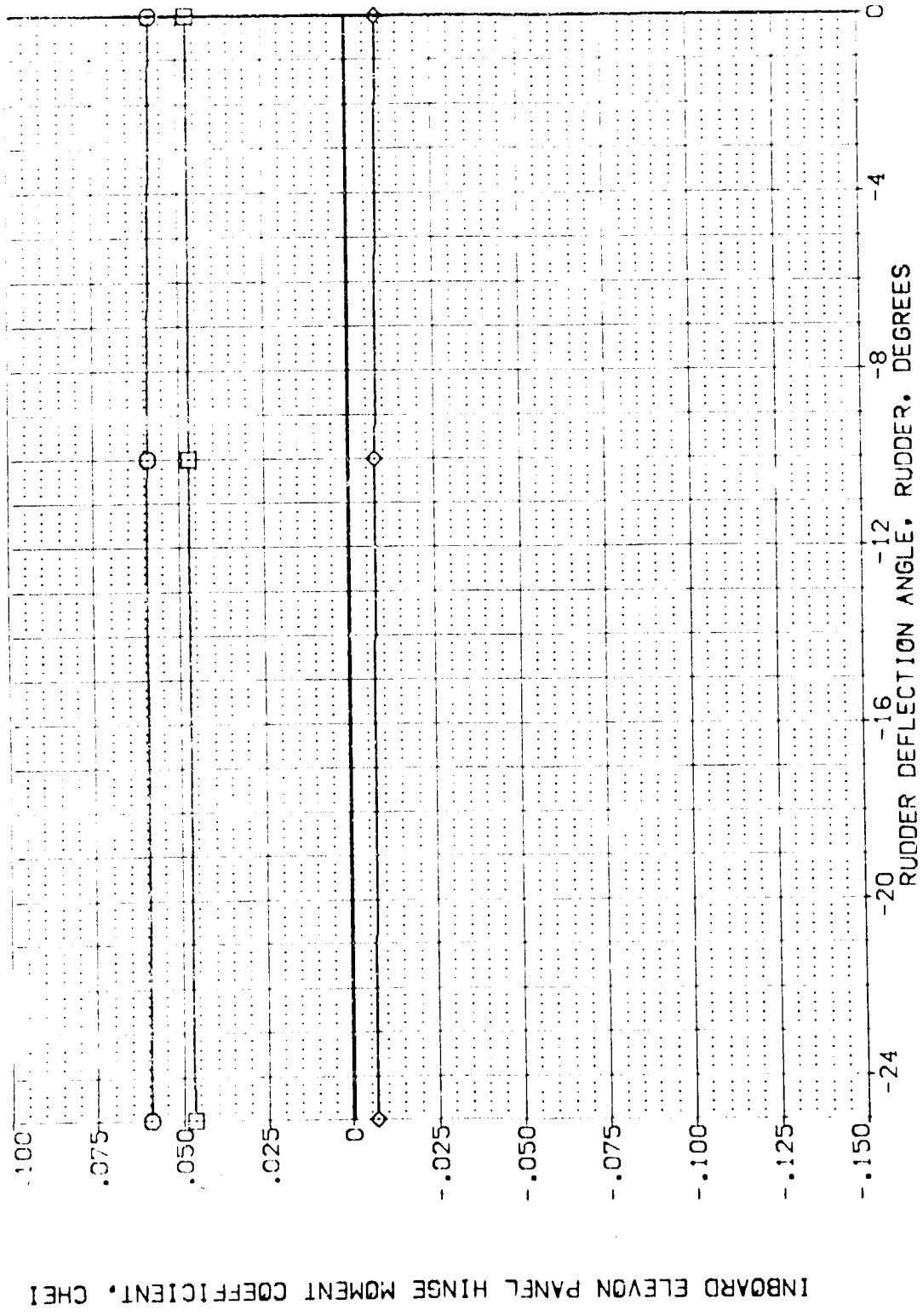


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
○ □ ◇

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BOFLAP  
ELEV-L

PARAMETRIC VALUES  
.800 BETA  
.000 AILRON  
-11.700 SPEEDRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440 IN.  
BREF 28.1004 IN.  
XMRP 32.3010 IN.  
YMRP .0000 IN.  
ZMRP 11.2500 IN.  
SCALE .0300

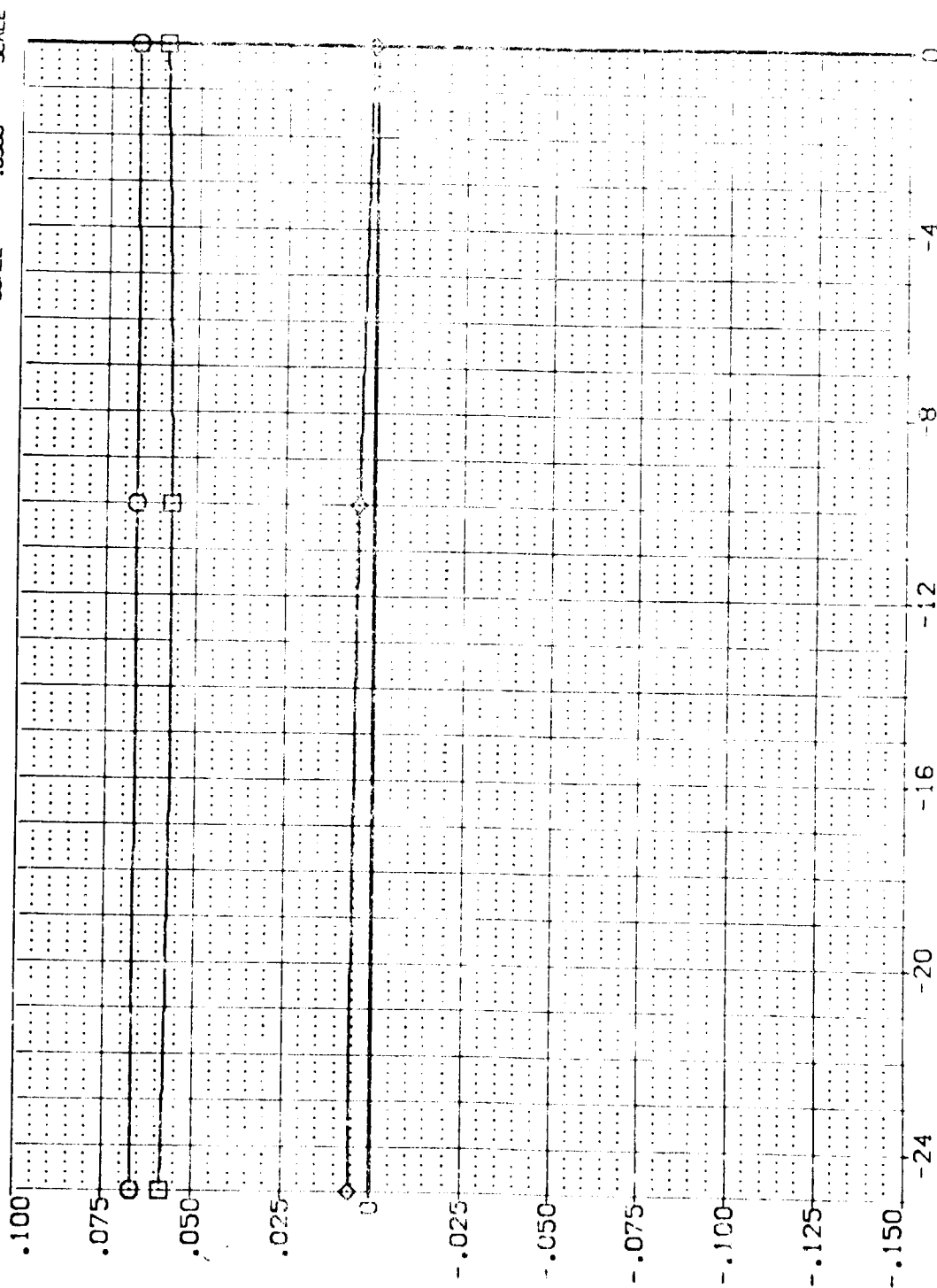


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG





ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

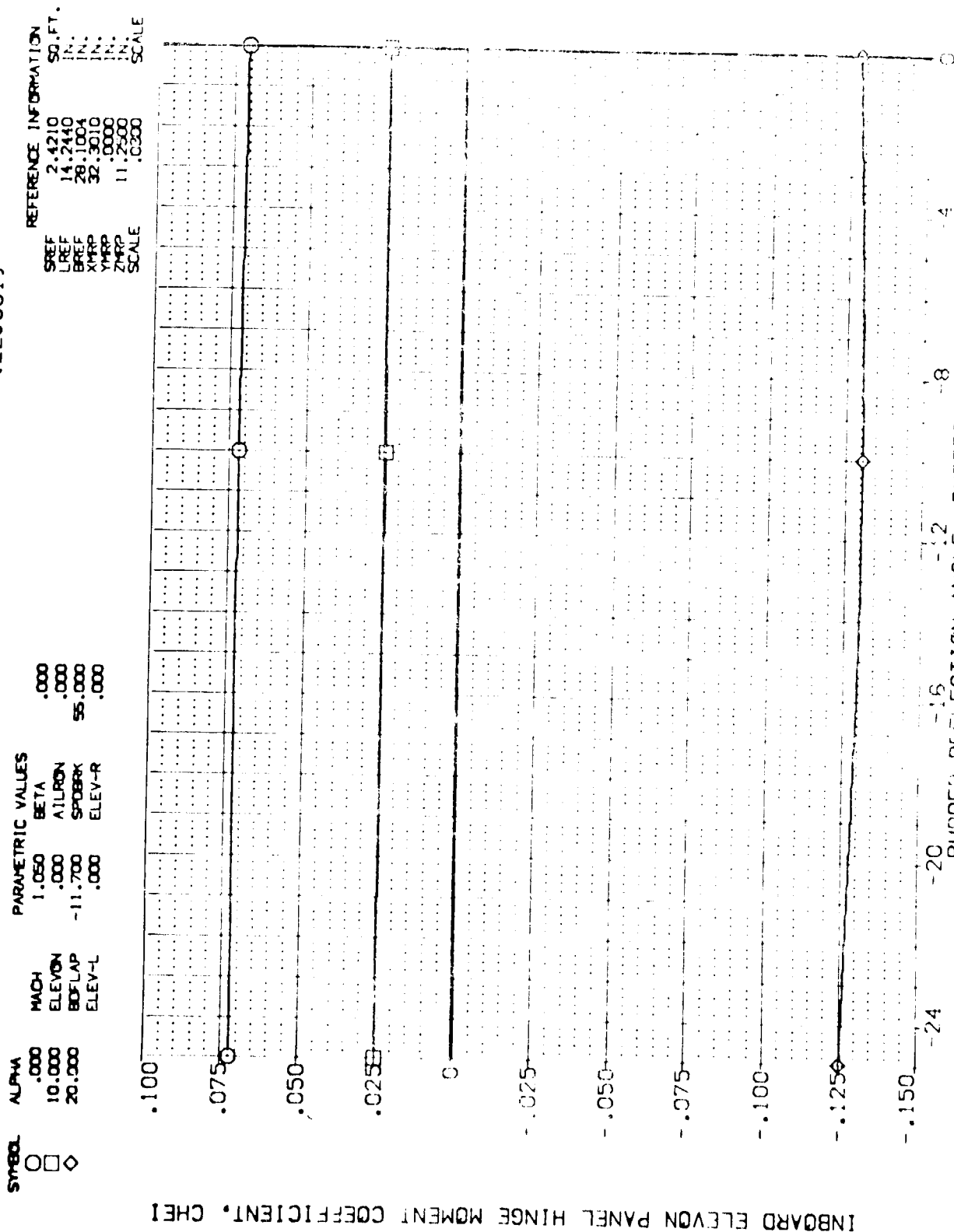


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG

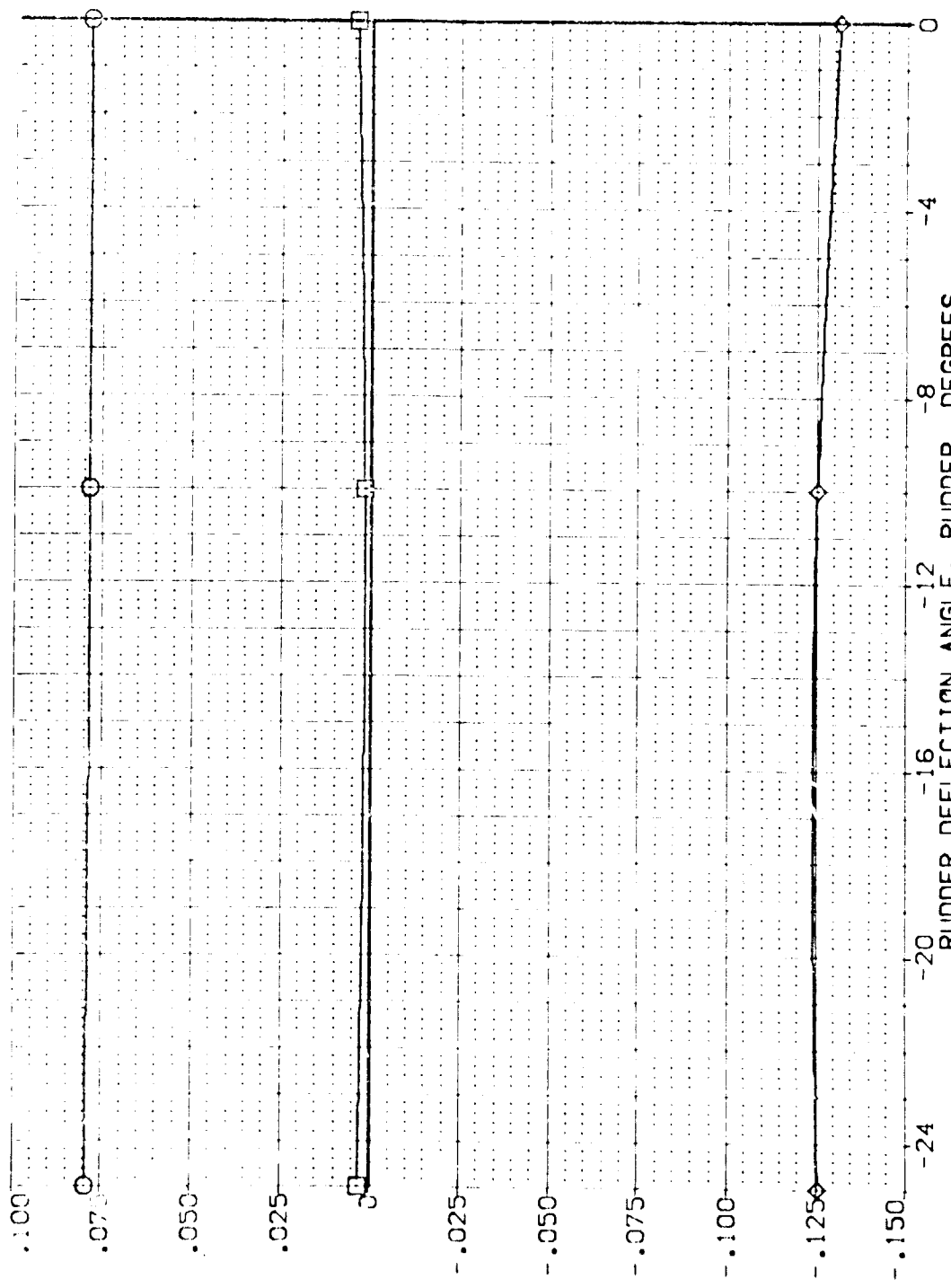


ARC 11-747 0A53A R C M F W I V NOM. RN/L (EEJ051)

SYMBOL  
ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH  
1.200  
ELEVON  
.000  
BOULAP  
-11.700  
ELEV-R  
.000

REFERENCE INFORMATION  
SREF  
2.4210  
LREF  
14.2440  
BREF  
28.1004  
XREF  
32.3010  
YREF  
.0000  
ZREF  
11.2400  
SCALE  
10.000



INBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HFI</sub>

FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG  
PAGE 1261

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

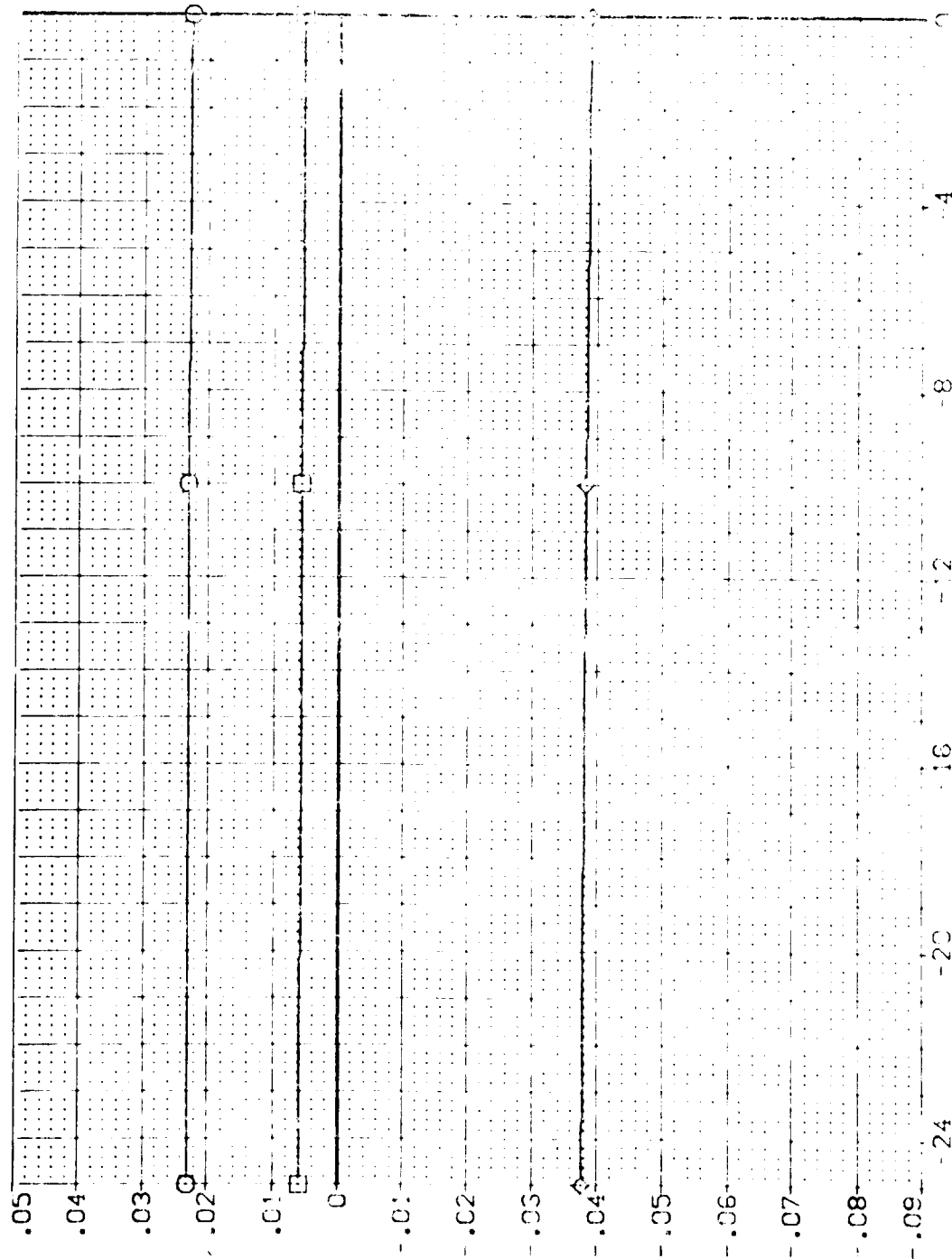
SYMBOL

○ □ ◇

PARAMETRIC VALUES  
 MACH .600 BETA .000  
 ELEVON .000 AILRON .000  
 BDFLAP -11.700 SPOBRK 55.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XMRP 32.3010 IN.  
 YMRP .0000 IN.  
 ZMRP 11.2500 IN.  
 SCALE .0300

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>HO</sub>



RUDDER DEFLECTION ANGLE, DEGREES

FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDMAKE = 55 DEG

ARC 11-747 GA53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
 ○ 1.0  
 ◇ 0.5

ALPHA  
 300  
 1000  
 20000

PARAMETRIC VALUES  
 MACH .800  
 BETA .000  
 ELEVON .000  
 90FLAP -11.000  
 ELEV-H .000  
 ELEV-H .000  
 SPOON 55.000

OUTBOARD ELEVON PANEL HINGE MOMENT COEFFICIENT, C<sub>H</sub>

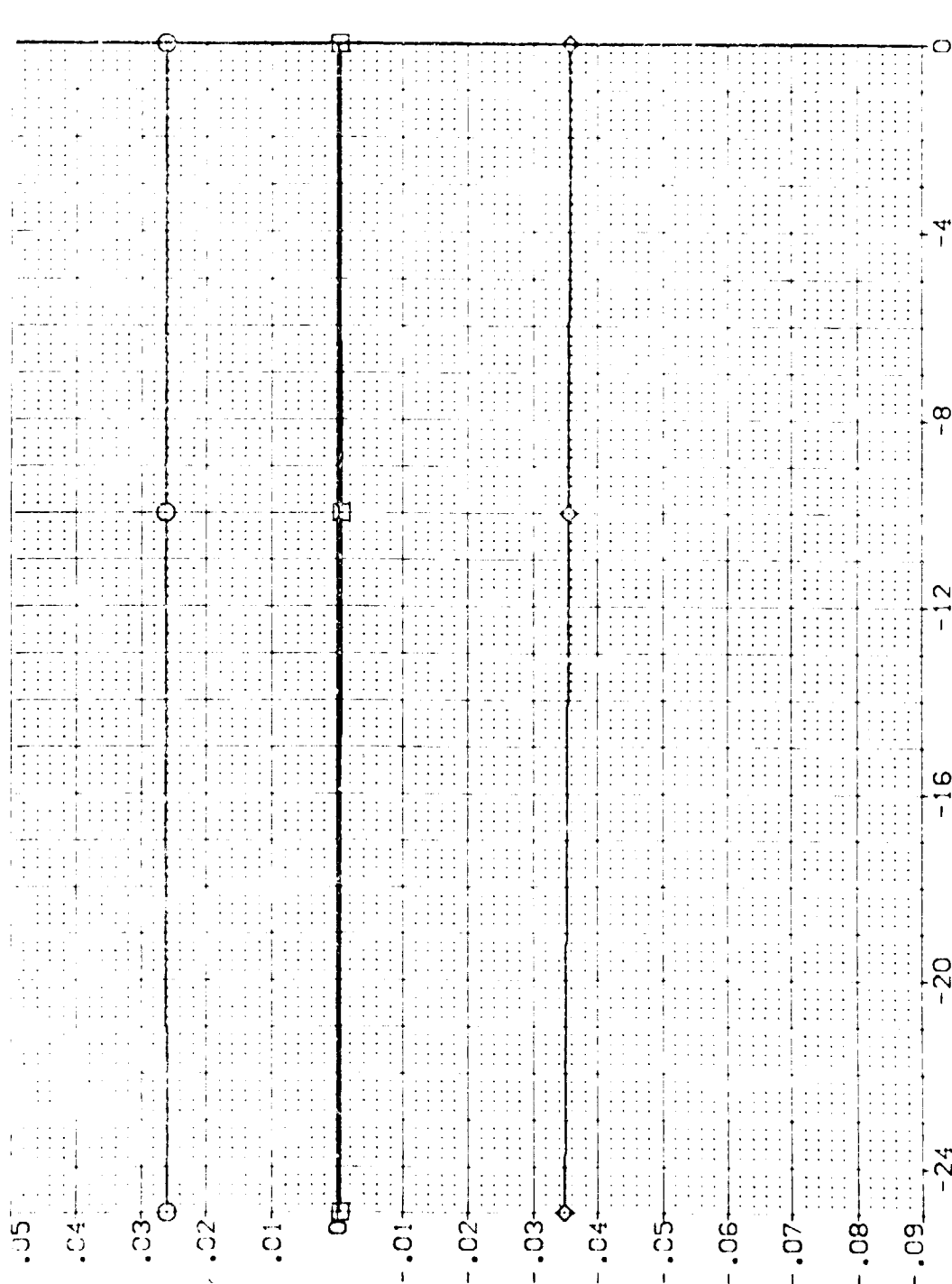


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMOMENT, SPEEDBRAKE = 55 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
☐ ☐ ☐ ☐

ALPHA  
 .000  
 10.000  
 20.000

PARAMETRIC VALUES  
 MACH .900 BETA .000  
 ELEVON .000 AIRRON .000  
 BOFLAP -11.700 SPEEDRK 55.000  
 ELEV-L .000 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 BREF 28.1004 IN.  
 XPRP 32.3010 IN.  
 YPRP .0000 IN.  
 ZPRP 11.2500 IN.  
 SCALE .0000



FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGEMENT, SPEEDBRAKE = 55 DEG



ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL	ALPHA	PARAMETRIC VALUES				REFERENCE INFORMATION			
		MACH	BETA	AILRON	SPDRK	SREF	LREF	BREF	XMRP
□	.000	1.200	.000	.000	.000	2.4210	14.2440	20.1004	32.3010
□	10.000	.000	.000	.000	.000	11.2300	11.2300	11.2300	11.2300
◇	20.000	-11.700	.000	.000	.000	11.2300	11.2300	11.2300	11.2300
		ELEV-L	ELEV-R			SCALE			

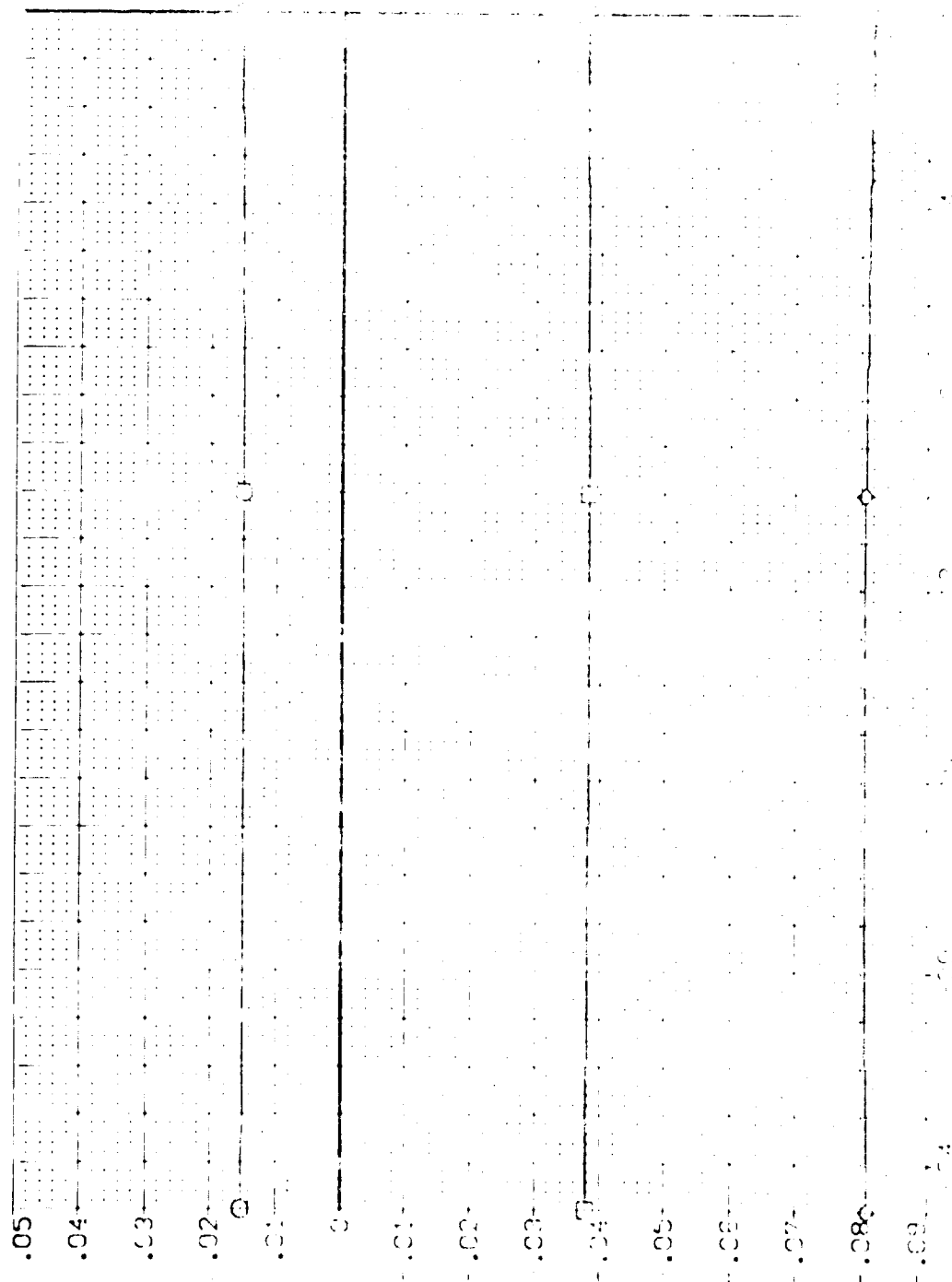


FIG. 49 EFFECT OF RUDDER DEFLECTION ON ELEVON HINGE MOMENT, SPEEDBARK = 60 DEG

APC 11 741 2453A H C M F W I V NOM. RN/L (EEJ051)

SYMBOL

○  
◇

PARAMETRIC VALUES

ALPHA .000  
BETA .000  
ELEVATION .000  
FLAP .000  
ELEV .000

REFERENCE INFORMATION  
SREF 24410  
LREF 14440  
BREF 28400  
AREF 32400  
VREF 11400  
SCALE 10000

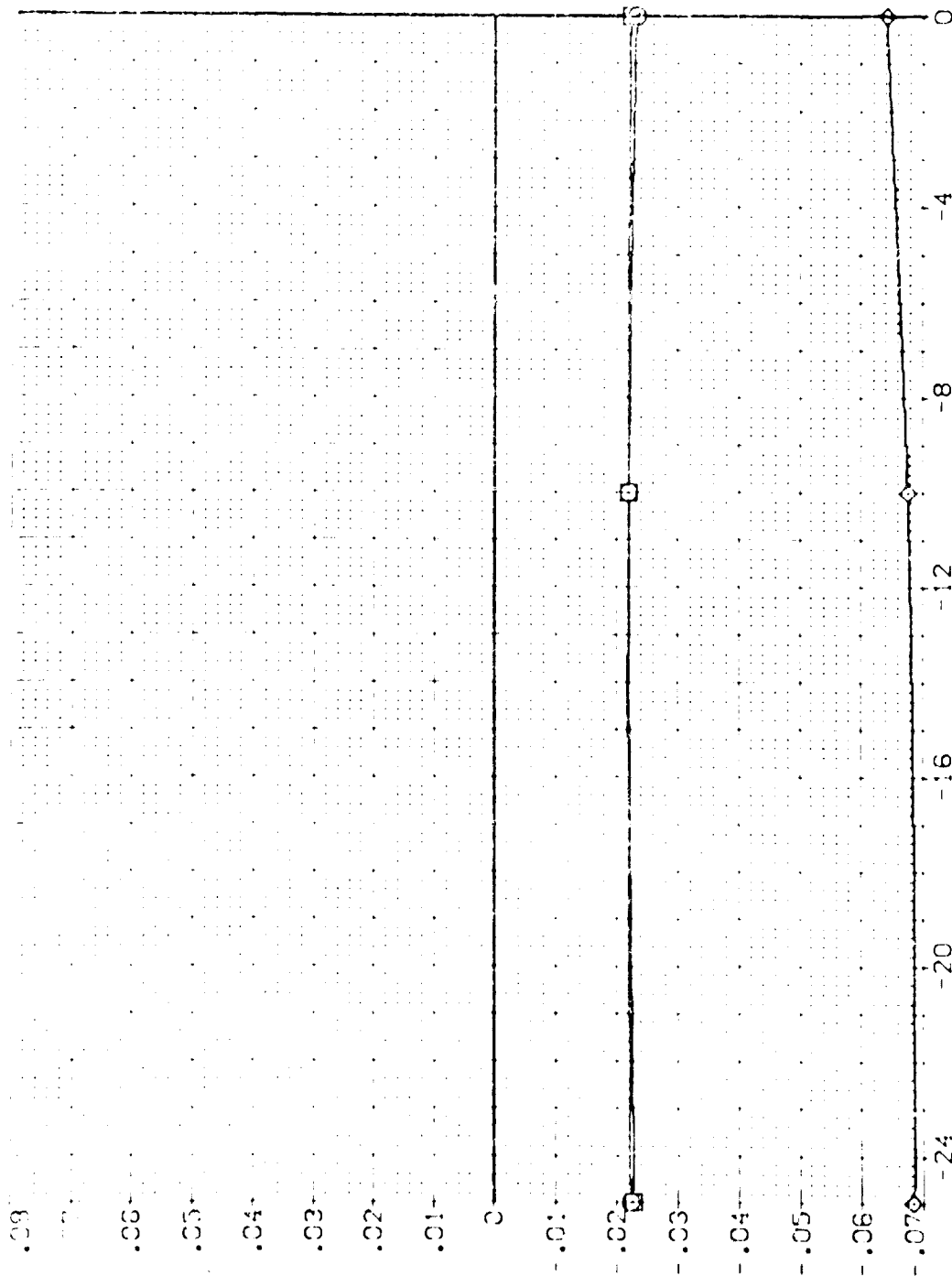


FIG. 50 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMENT, SPEEDBRAKE= 55 DEG

ARC 11-747 0A53A B C M F W1 V NOM. RN/L (EEJ051)

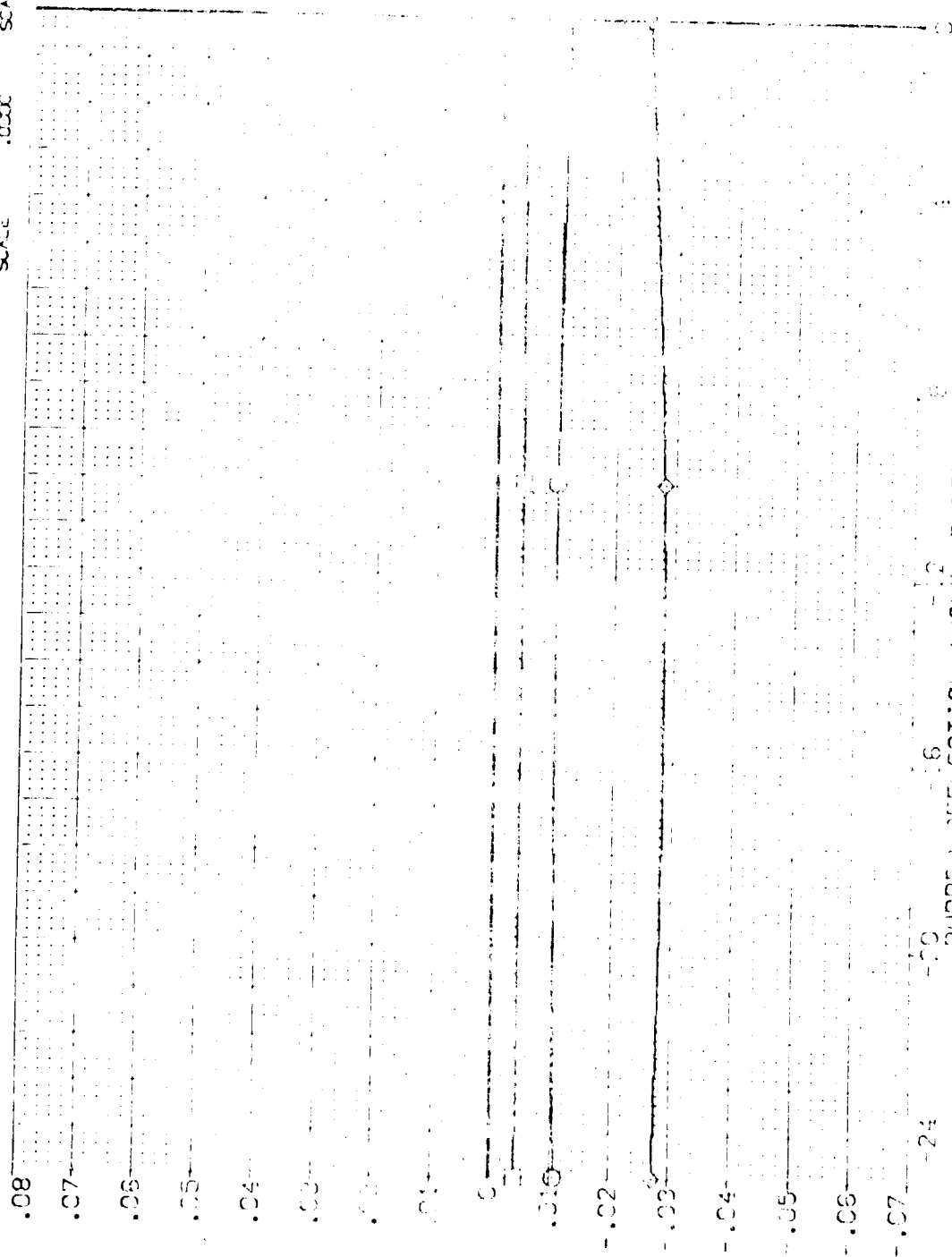
SYMBOL

ALPHA  
.000  
10.000  
20.000

MACH  
ELEVON  
BOFLAP  
ELEV-L

PARAMETRIC VALUES  
.800 BETA  
.000 AILRON  
-11.700 SPOBRK  
.000 ELEV-R

REFERENCE INFORMATION  
SREF 2.4210 SQ.FT.  
LREF 14.2440  
BREF 28.1004  
XMRP 32.3016  
YMRP .0000  
ZMRP 11.2500  
SCALE .0000



BODY FLAP HINGE MOMENT COEFFICIENT, CHBF

FIG. 50 EFFECT OF RUDDER DEFLECTION ON BODY FLAP HINGE MOMENT, CHBF. RUDDER DEFLECTION ANGLE, DEGREES



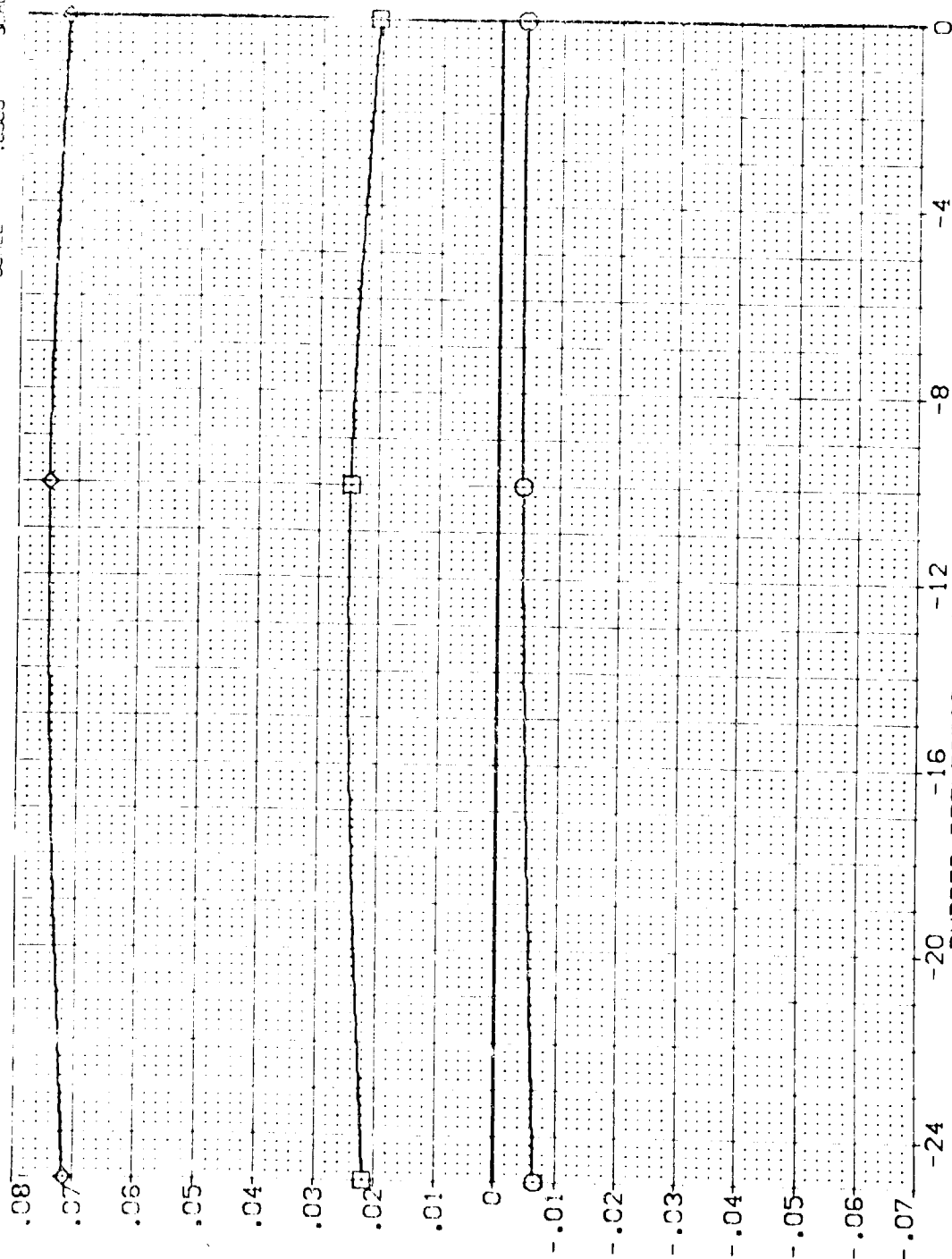
ARC 11-747 JAS3A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
 O  
 O  
 O  
 O

ALPHA  
 .000  
 16.000  
 20.000

PARAMETRIC VALUES  
 MACH .900  
 ELEVON .000  
 SPEED 55.000  
 ELEV-L .000  
 ELEV-R .000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440 IN.  
 DREF 28.1004 IN.  
 XREF 32.7010 IN.  
 YREF 11.0000 IN.  
 ZREF 11.0000 IN.  
 SCALE 1.0000



BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

RUDDER DEFLECTION ANGLE, RUDDER, DEGREES

FIG. 50 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE= 55 DEG

ARC 11-747 0A53A B C M F W I V NCM. RN/L (EEJ051)

SYMBOL  
◇

ALPHA  
.000  
10.000  
20.000

PARAMETRIC VALUES  
MACH 1.050  
ELEVON .000  
BOFLAP -11.700  
ELEV-L .000

BETA  
AILRON  
SPDRK  
ELEV-R

REFERENCE INFORMATION  
SREF 2.4210  
LREF 14.2440  
BREF 28.1004  
XREF 32.3010  
YREF .0000  
ZREF 11.2500  
SCALE .0300

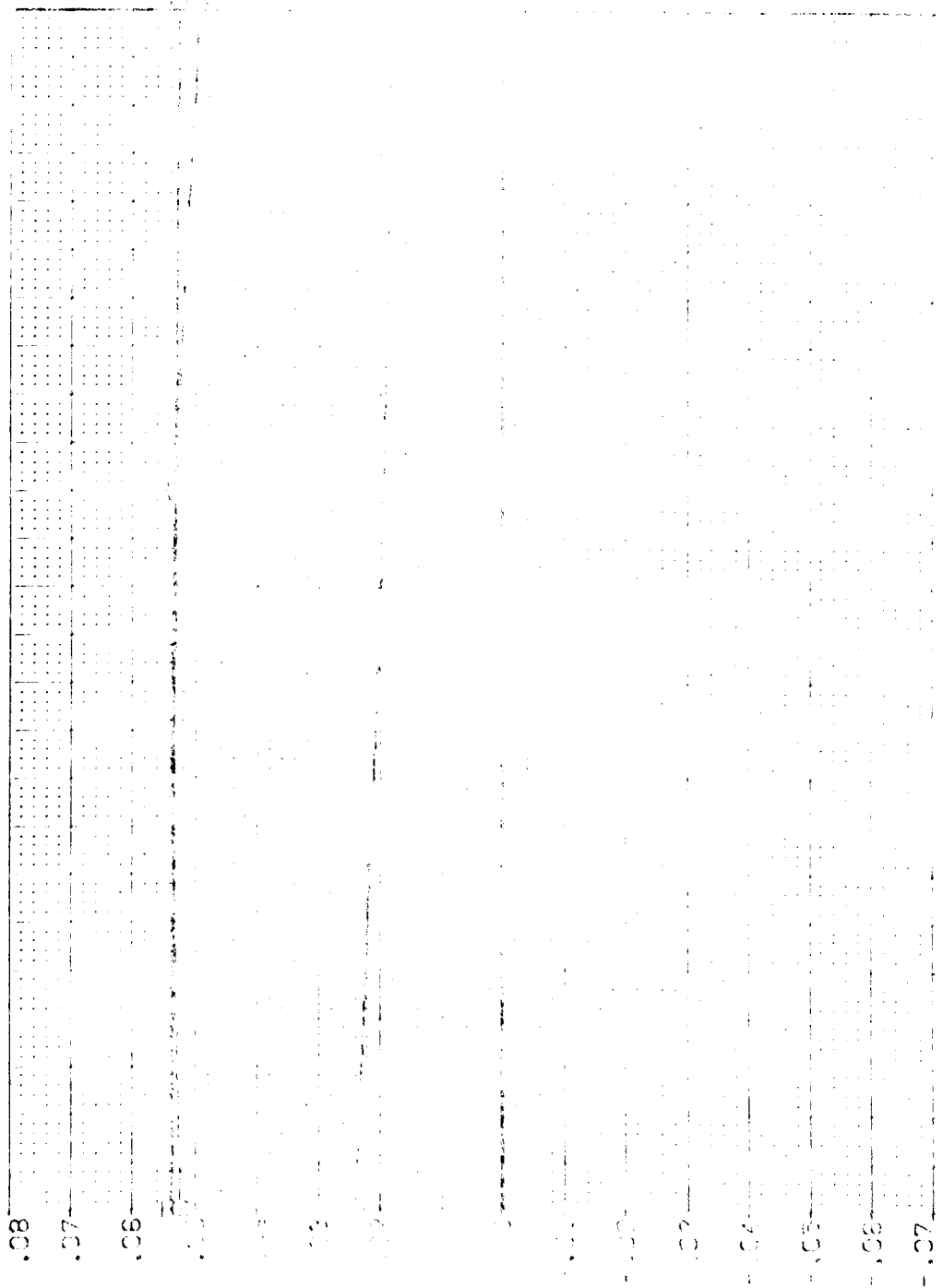


FIG. 50 EFFECT OF RUDDER DEFLECTION ON BODY FLAP HINGE MOMENT. SPREADSHEET = 05 050  
PAGE 1070



ARC 11-747 OA53A B C M F W1 V NOM. RN/L (EEJ051)

SYMBOL  
 REFERENCE INFORMATION  
 SPEC 2.4210 SQ. FT.  
 LREF 14.2440 IN.  
 SREF 28.1004 IN.  
 YREF 32.3010 IN.  
 ZREF 0.0700 IN.  
 SCALE 11.2500 SCALE

PARAMETRIC VALUES  
 MACH 1.200 BETA .000  
 ELEVON .000 AIRRON .000  
 BDEFAP -11.700 SPEEDRA 55.000  
 ELEV-L .000 ELEV-R .000

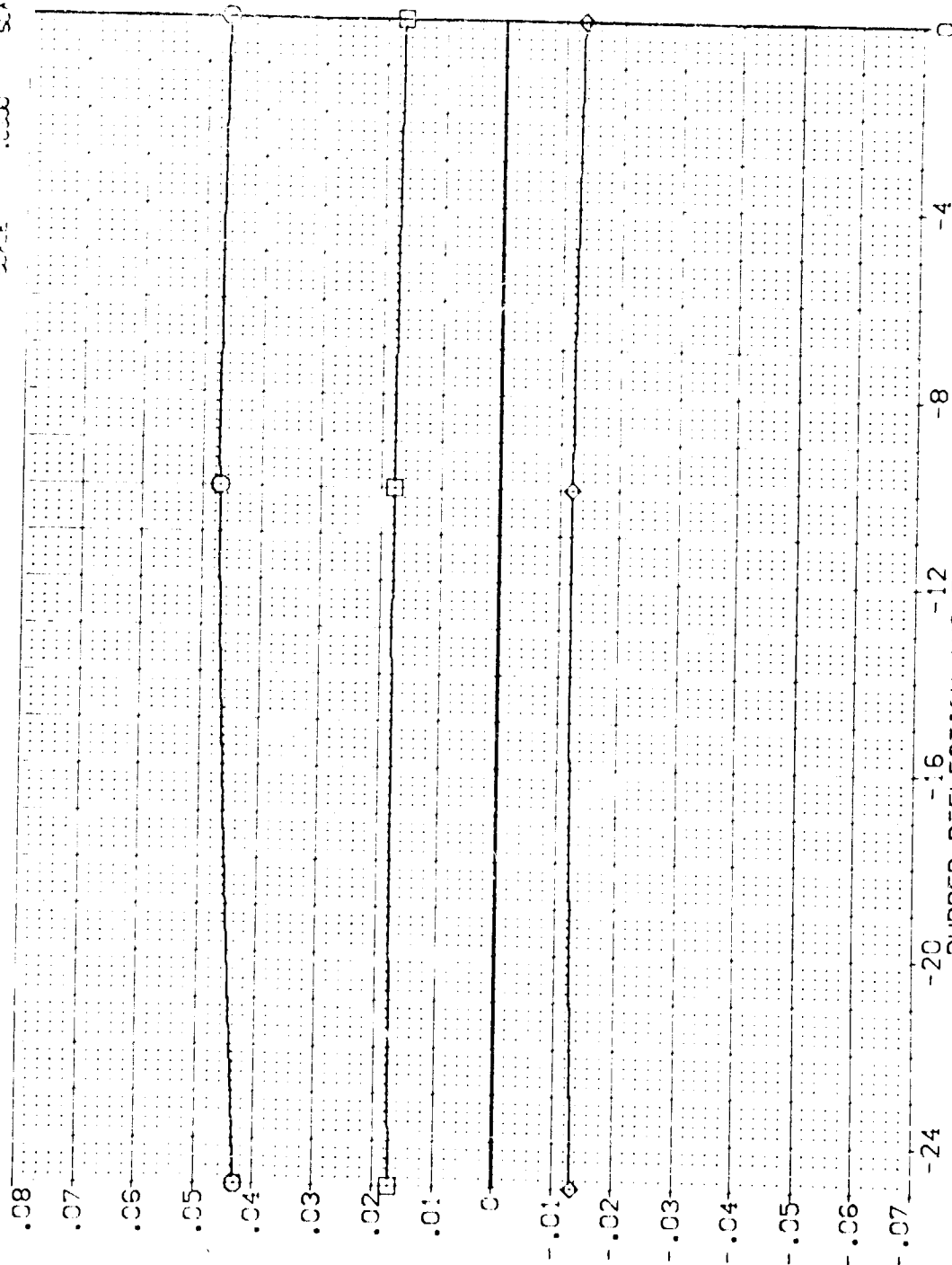


FIG. 50 EFFECT OF RUDDER DEFLECTION ON BODYFLAP HINGEMOMENT, SPEEDBRAKE= 55 DEG  
 PAGE 1271

BODYFLAP HINGE MOMENT COEFFICIENT, CHBF

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOGLAP SPOBRK REFERENCE INFORMATION

(YEJAZ6)	ARC 11-747 QAS3A B C M F VI V	.000	.000	-11.700	55.000	SREF	2.4210
(YEJAZ6)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF	14.2440
(YEJAZ7)	ARC 11-747 QAS3A B C M F VI V	20.000	.000	-11.700	55.000	EREF	28.1004
						UMRP	32.3010
						VMRP	11.0000
						ZMRP	11.2000
						SCALE	.0300
							SCALE

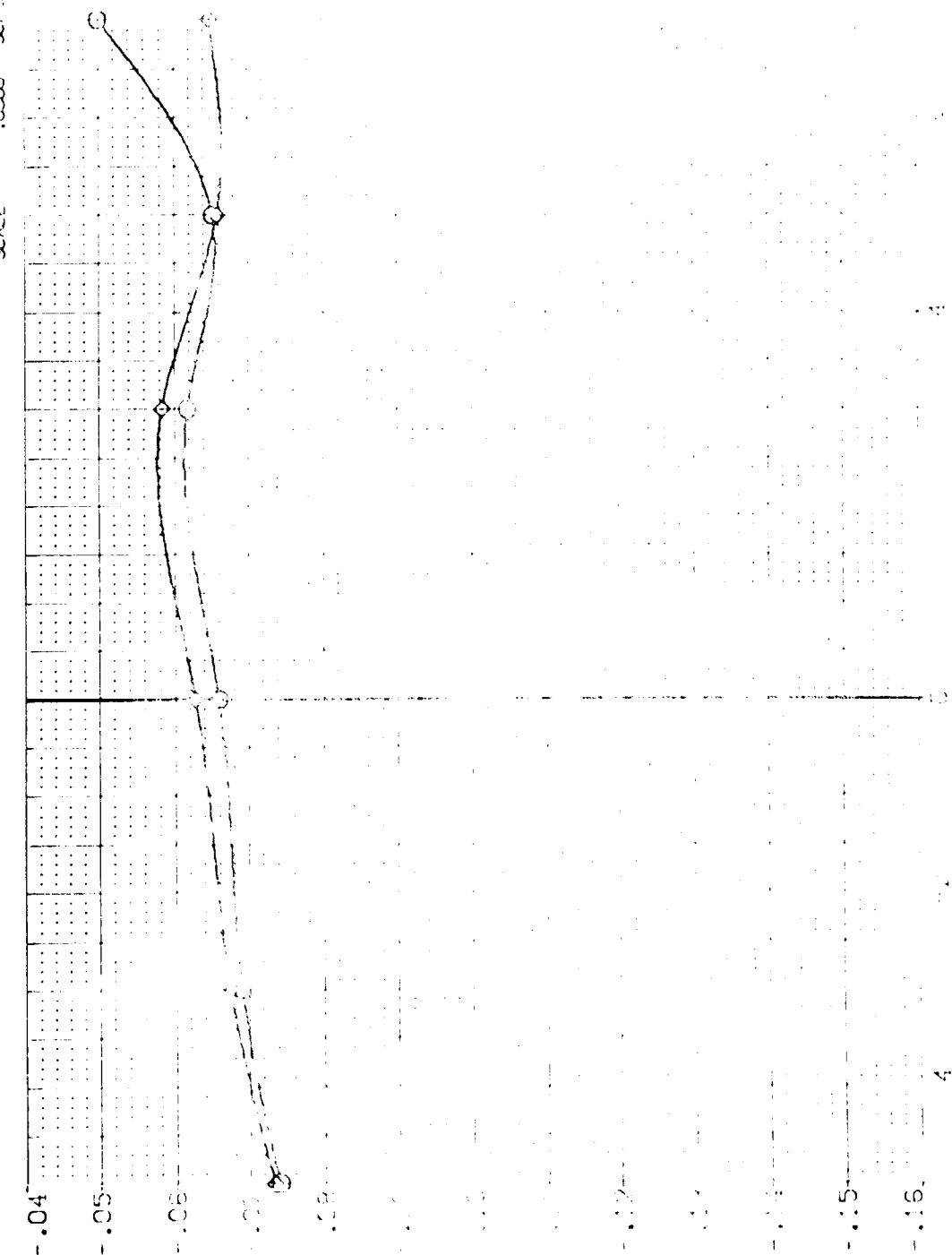


FIG. 51 RUDDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE CONSIDERATION TO 10 DEGREES  
 (ADMACH = .60) PAGE 1972



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
[YEA25]	ARC 11-747 CAS3A B C M F V	.000	.000	-11.700	55.000	SREF 2.4210 52.1 FT.
[YEA26]	ARC 11-747 CAS3A B C M F V	10.000	.000	-11.700	55.000	LRREF 14.2440
[YEA27]	ARC 11-747 CAS3A B C M F V	20.000	.000	-11.700	55.000	BRREF 28.1004
						VMREF 32.3010
						ZREF 11.0000
						ZREF 11.2500
						SCALE .0350

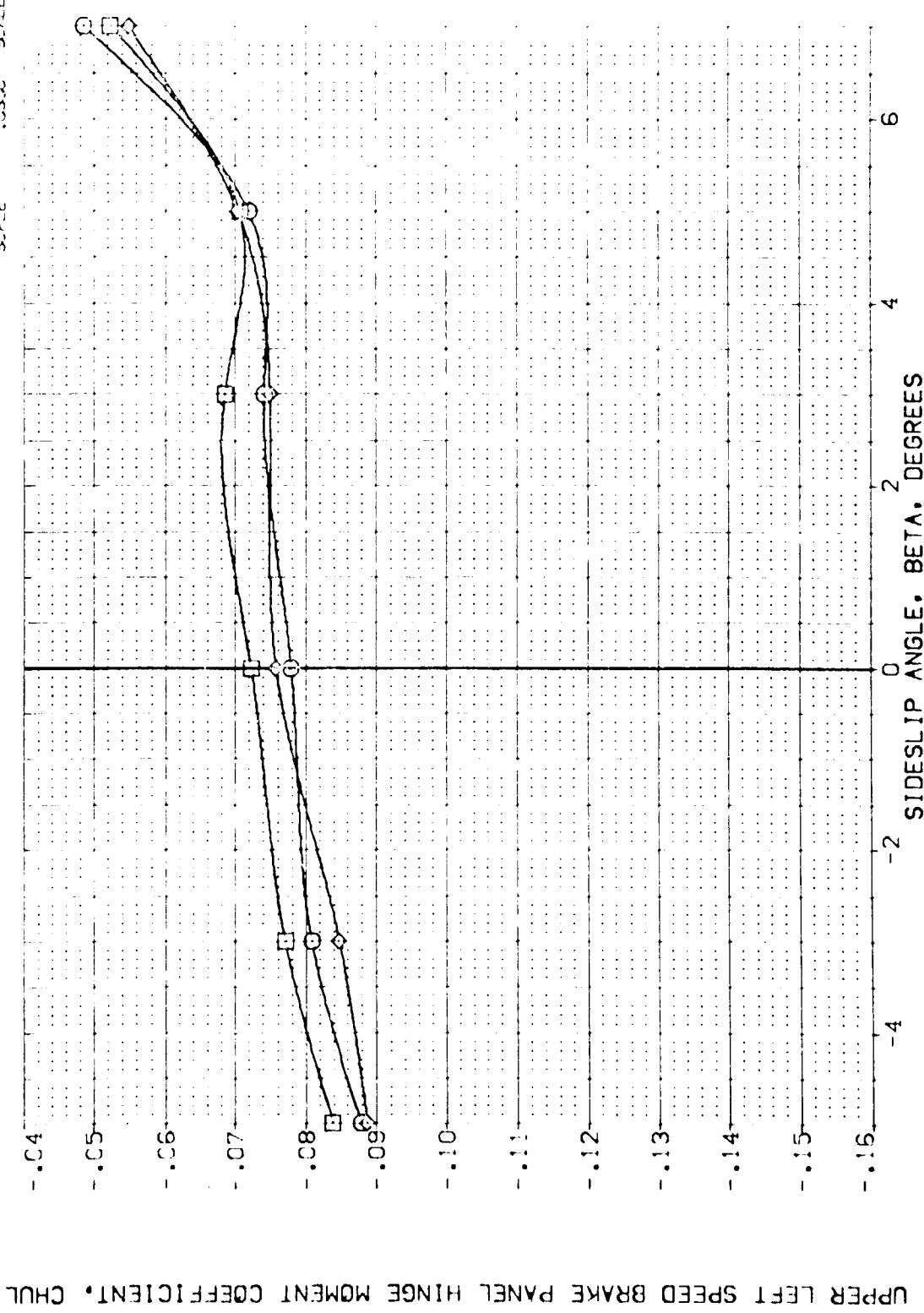


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (B)MACH = .90

DATA SET SYMBOL: (VEJA25) (VEJA26) (VEJA27)

CONFIGURATION DESCRIPTION: ARC 11-747 DASSA B C H F V1 V DATA NOT AVAILABLE ARC 11-747 DASSA B C H F V1 V

REFERENCE INFORMATION: SREF 2.4210 SCLF 14.2440 LREF 28.1004 BREF 32.3010 XMRP .0000 YMRP .0000 ZMRP 11.2500 IN. SCALE .0300

ALPHA: .000 10.000 20.000

RUDER: .000 .000 .000

BOFLAP: -11.700 -11.700 -11.700

SPDRK: 55.000 55.000 55.000

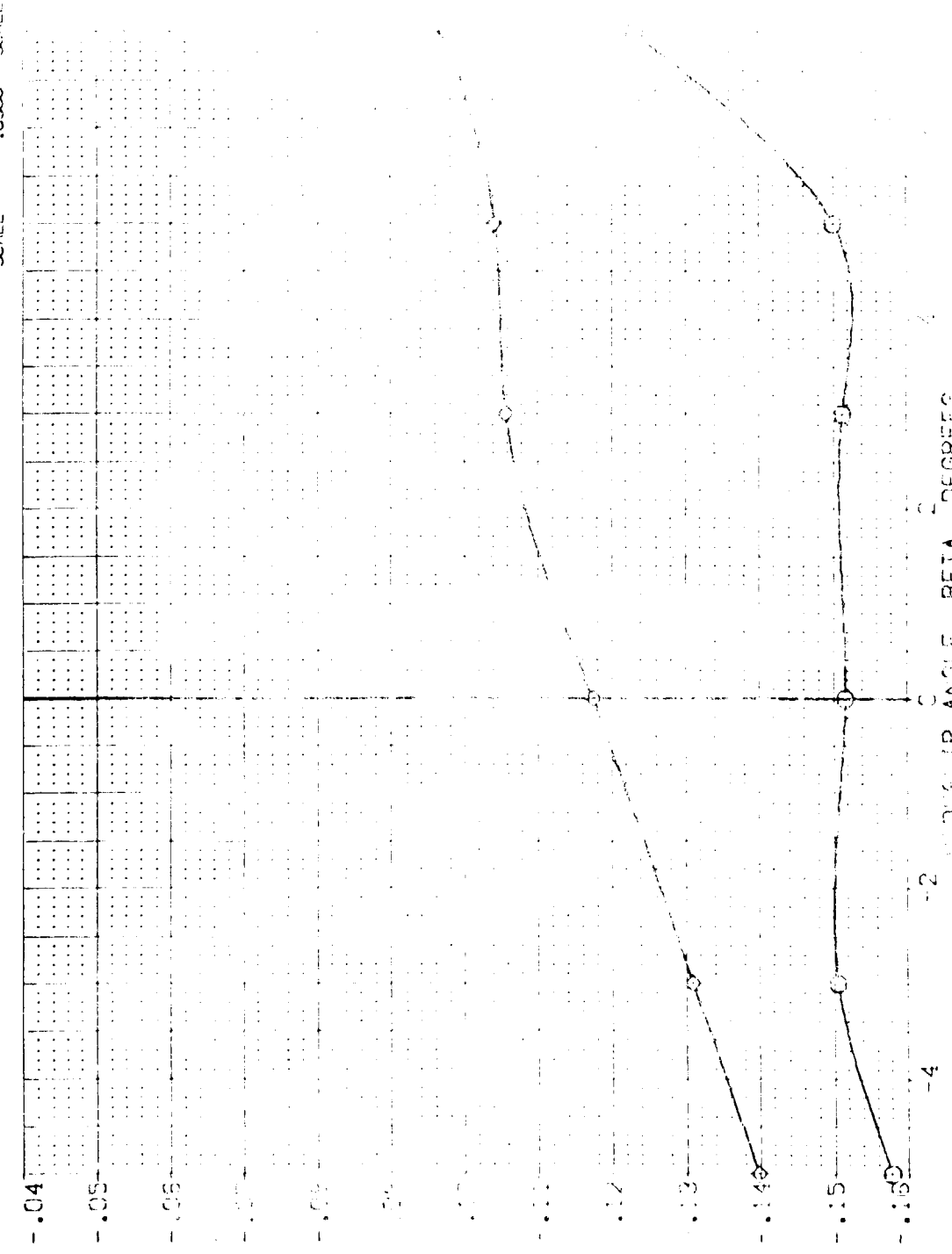


FIG. 51 RUDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
COMACH = 1.20

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(YEAZ5)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YEAZ6)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(YEAZ7)	ARC 11-747 OAS3A B C H F VI V	20.000	.000	-11.700	55.000	SREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

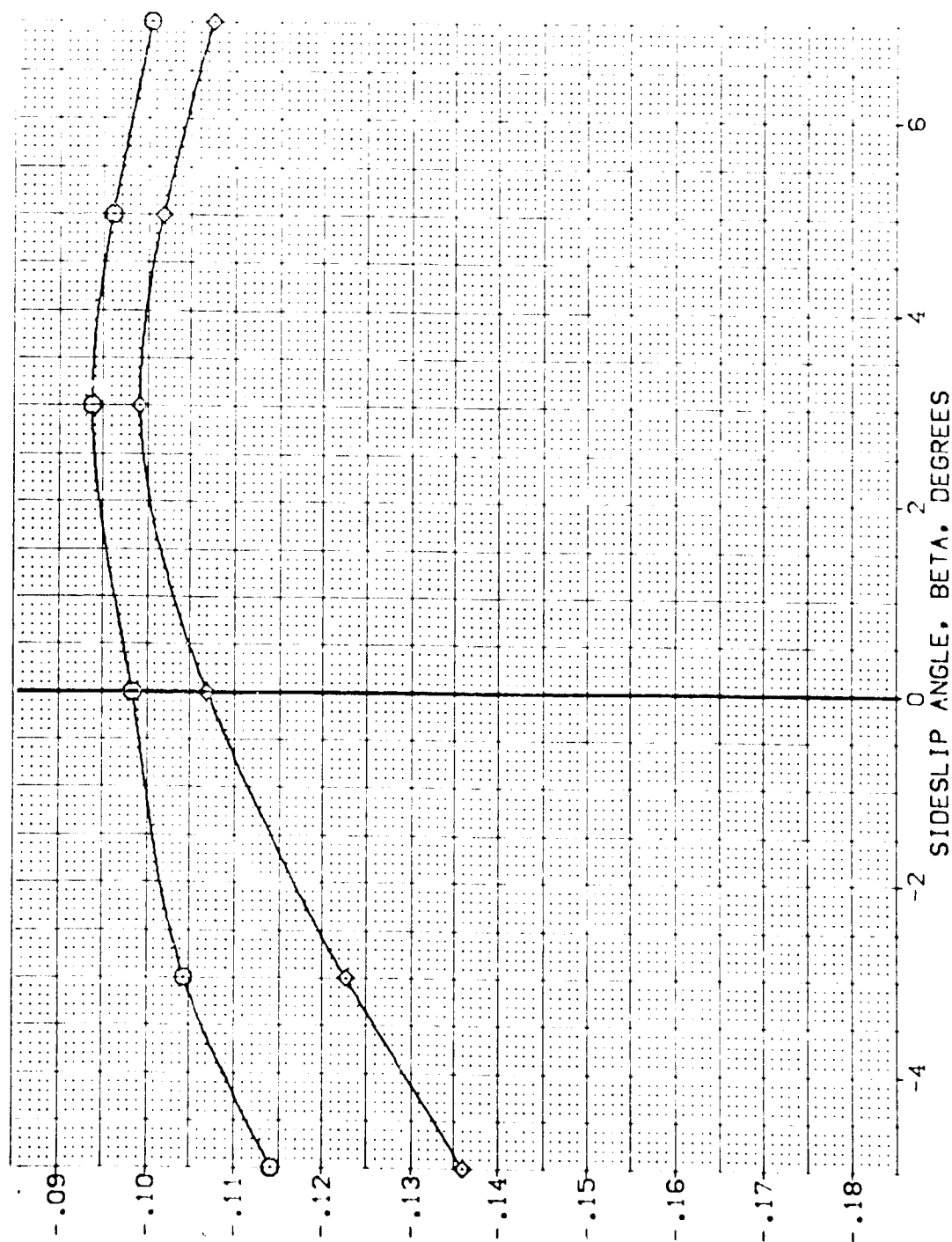


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOFLAP SPOBRK REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YEA25]	ARC 11-747 BA53A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210
[YEA26]	ARC 11-747 BA53A B C H F VI V	10.000	.000	-11.700	55.000	LREF 14.2440
[YEA27]	ARC 11-747 BA53A B C H F VI V	20.000	.000	-11.700	55.000	BREF 28.1004
						XREF 32.3010
						YREF .0000
						ZREF 11.2500
						SCALE .0500

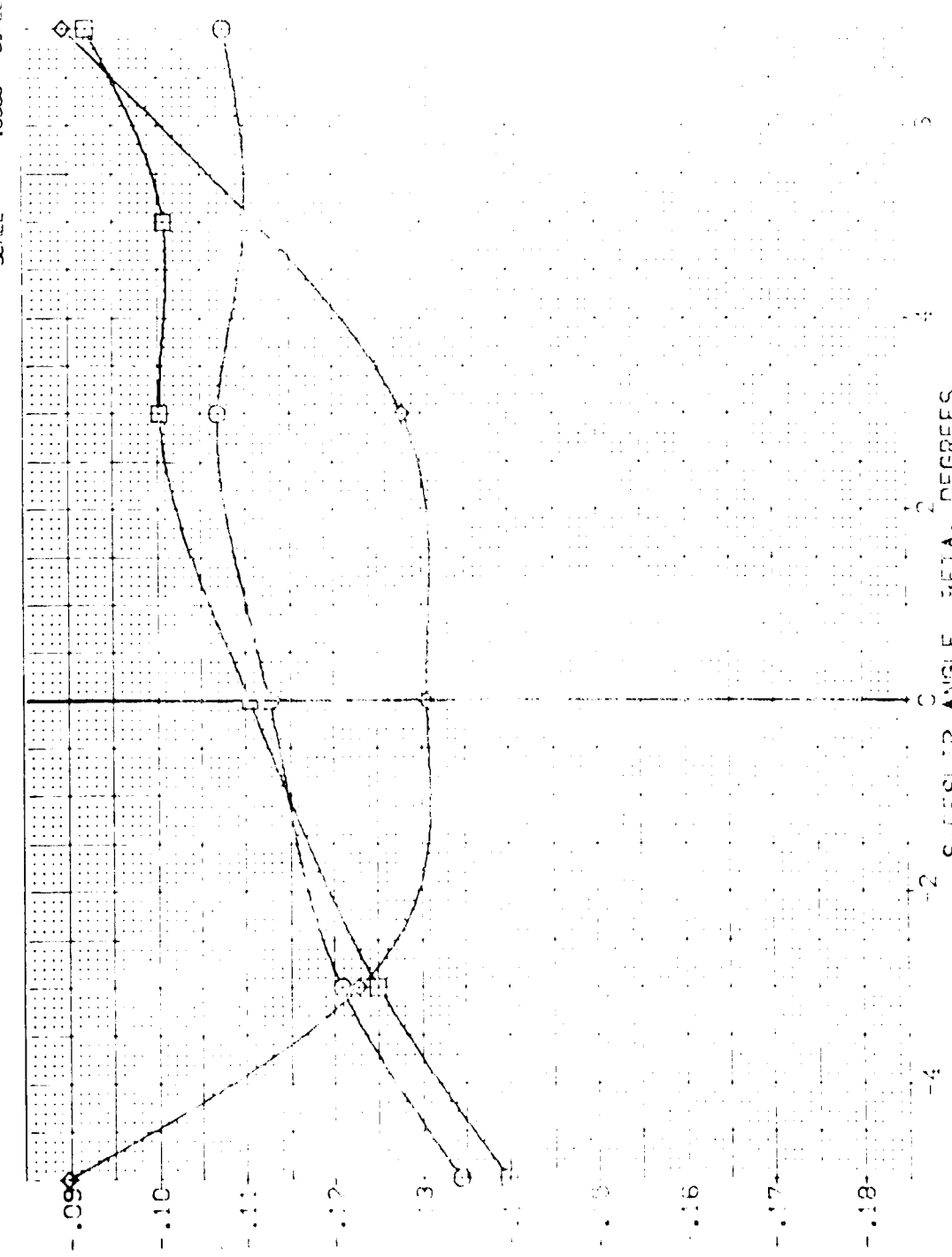


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEED OF FLOW = 100 KNOTS  
 (B)MAC = .90





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BUFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(YEAJ25)	ARC 11-747 DALS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 50.000
(YEAJ26)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF 14.2440 10.000
(YEAJ27)	ARC 11-747 DALS3A B C H F VI V	20.000	.000	-11.700	55.000	BREF 28.1004 10.000
						XMRP 32.3010 10.000
						YMRP .0000 10.000
						ZMRP 11.2500 10.000
						SCALE .0300

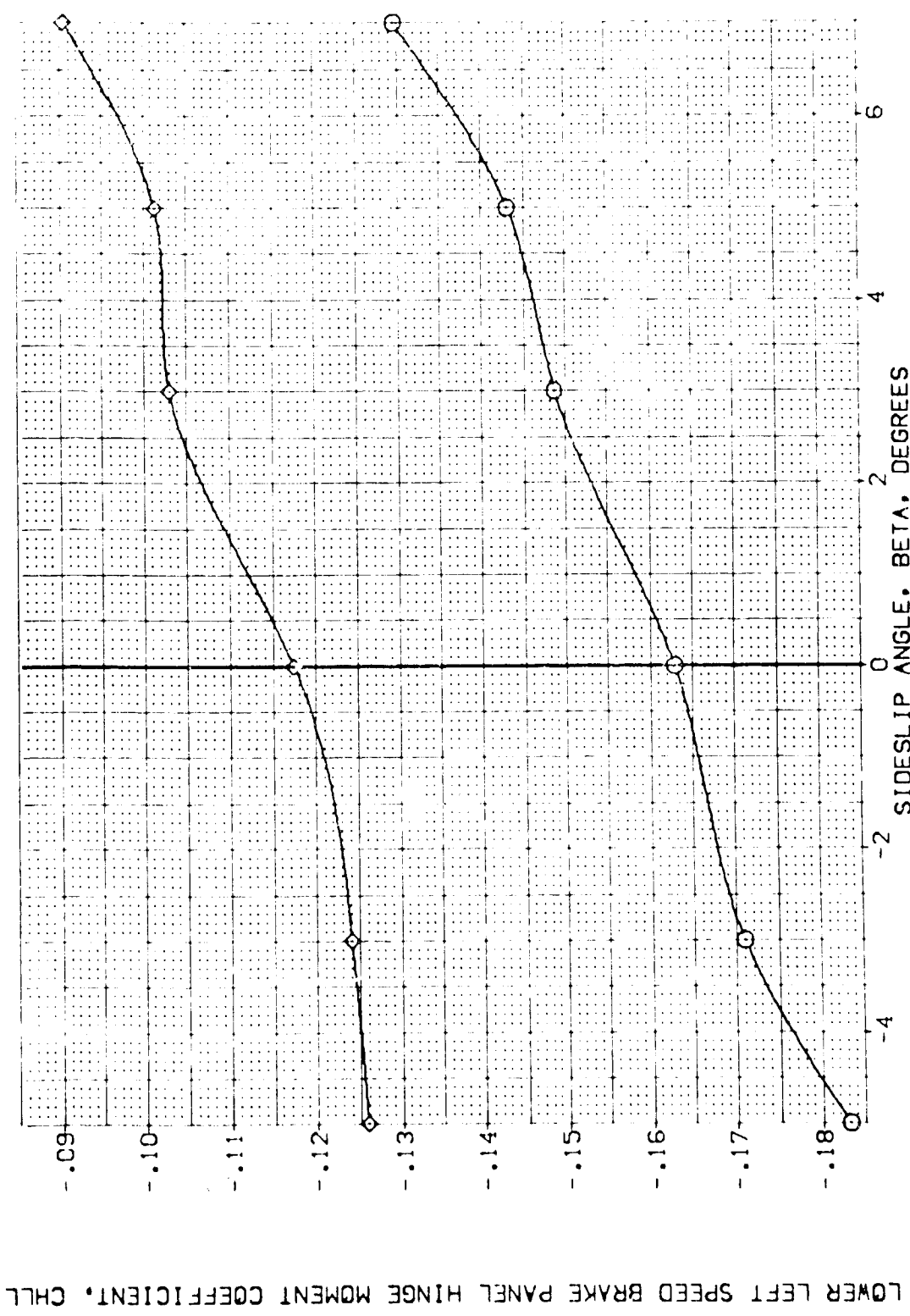


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = 1.20



UPPER RIGHT SPEED BRAKE PANEL FINGERMENT COEFFICIENT, CHUR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
[YEAJ25]	ARC 11-747 DAS3A B C H F VI V NOM, RV/L	.000	.000	-11.700	55.000	SREF 2.4210
[YEAJ26]	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF 14.2440
[YEAJ27]	ARC 11-747 DAS3A B C H F VI V NOM, RV/L	20.000	.000	-11.700	55.000	BREF 28.1004
						XMRP 32.3010
						YMRP .0000
						ZMRP 11.7000
						SCALE 11.0000

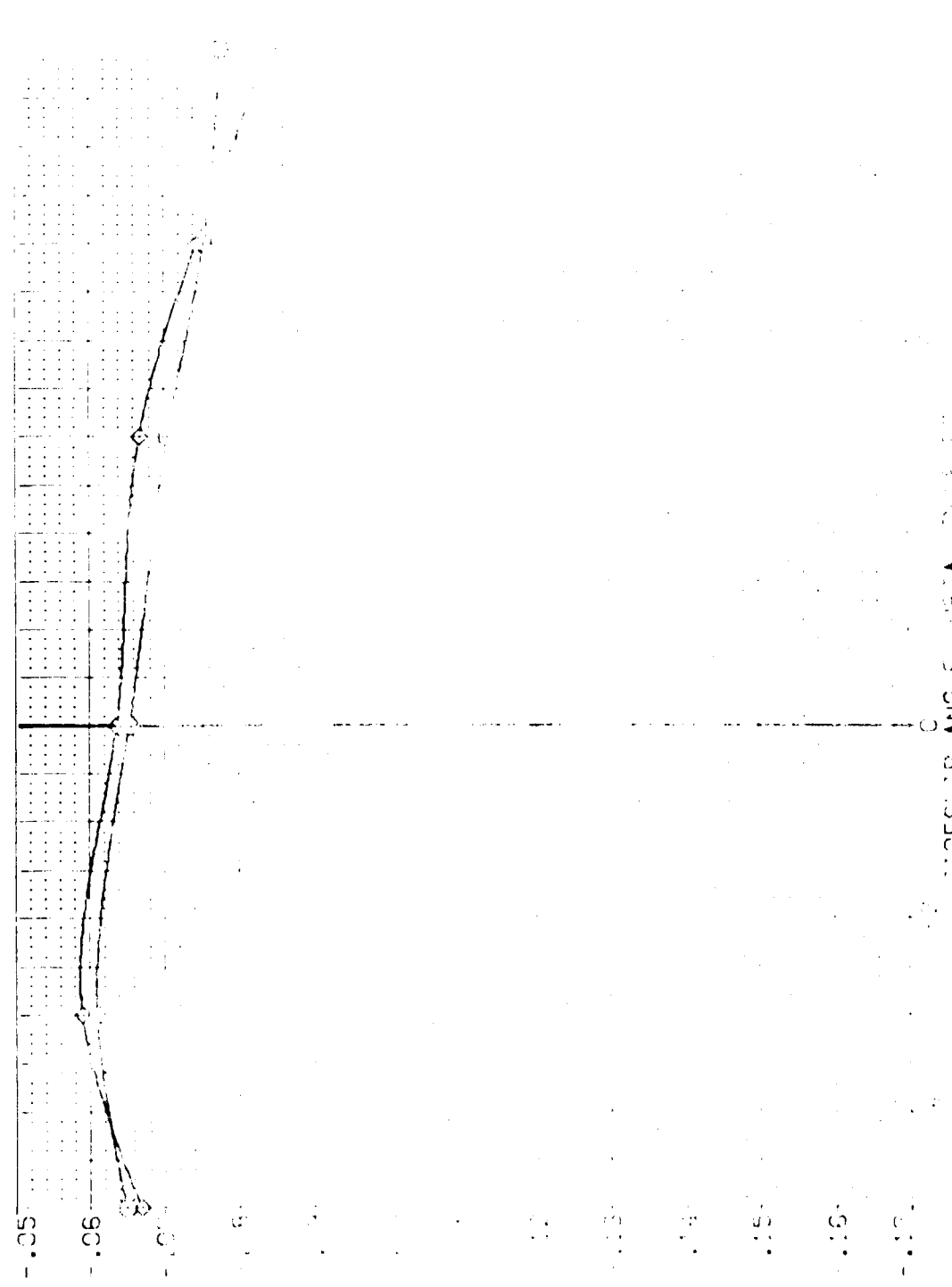


FIG. 51 RUDDER PANEL FINGERMENT VERSUS SIDESLIP AND -11.7000 DEGREE = 55.0000 DEGS  
C/MACH = .60 PAGE 1278

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOF LAP	SPOBRK	REFERENCE INFORMATION
ARC 11-747	GA53A B C H I VI V	.000	.000	-11.700	55.000	SREF 2.4210 50.000
ARC 11-747	GA53A B C H I VI V	10.000	.000	-11.700	55.000	LREF 14.2440 10.000
ARC 11-747	GA53A B C H I VI V	20.000	.000	-11.700	55.000	BREF 28.1004 10.000
						XREF 32.3010 10.000
						YREF 11.2500 10.000
						ZREF 11.2500 10.000
						SCALE 10.000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

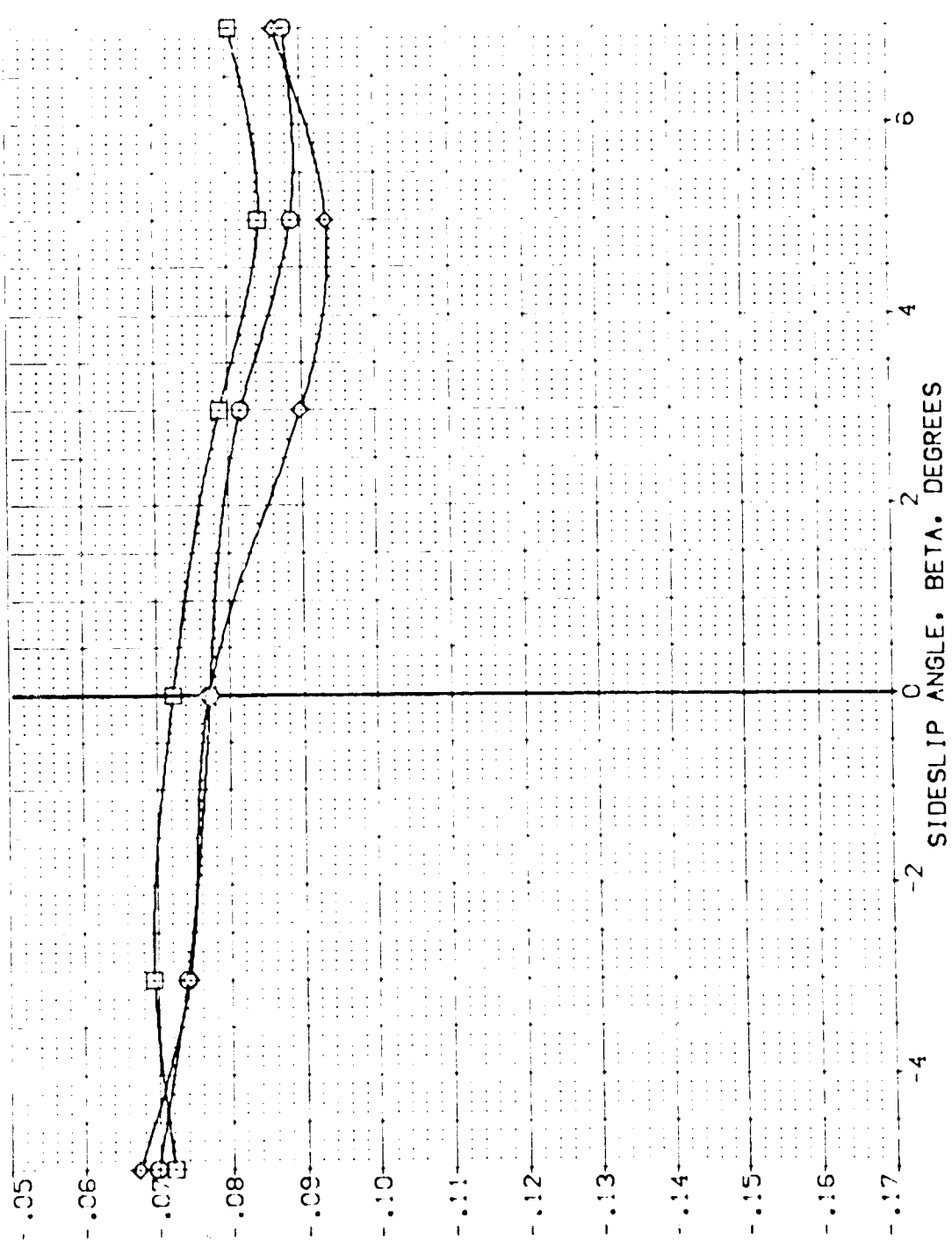


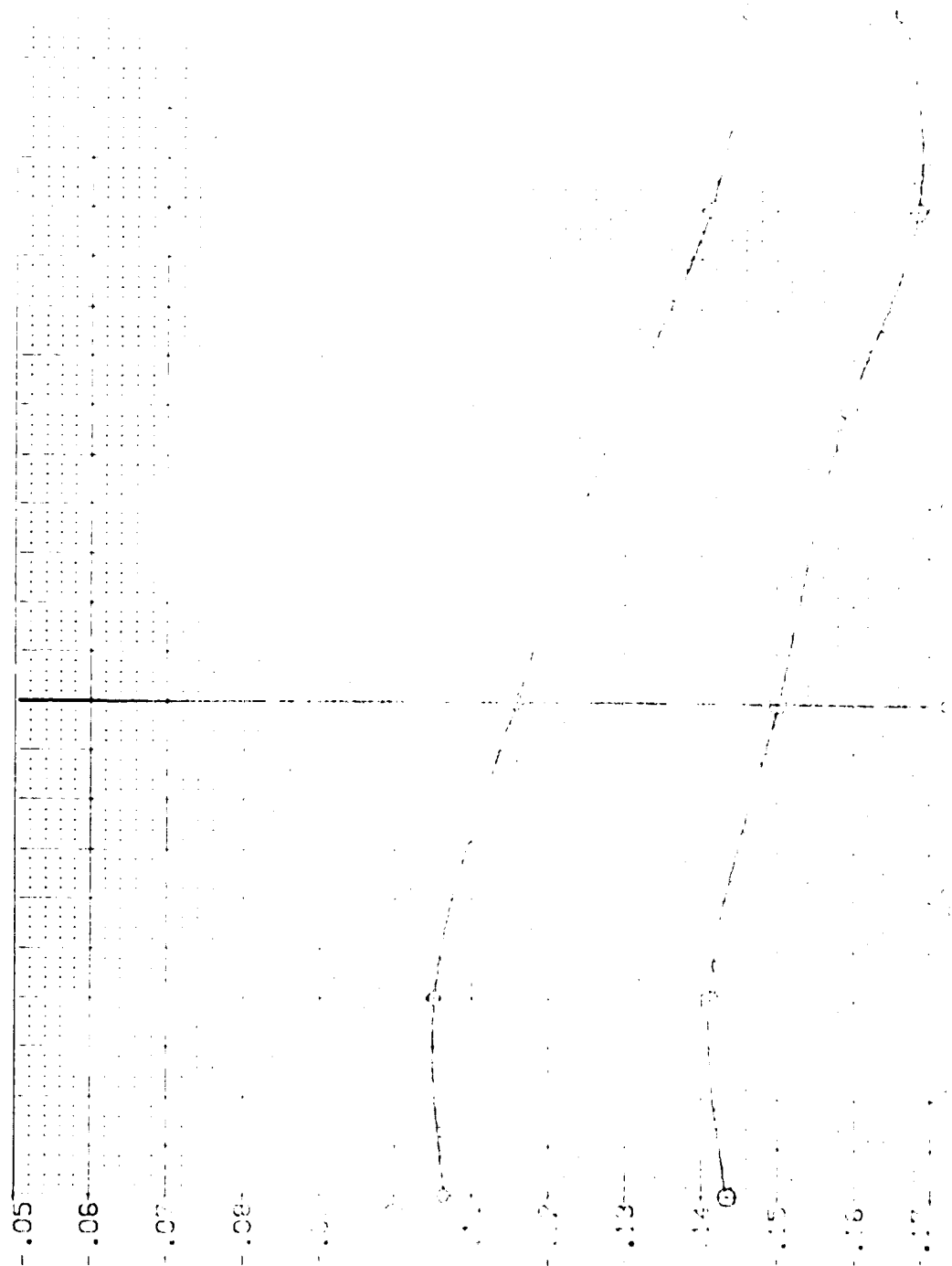
FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (B)MAC = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION  
 (YES/NO) ☐ ARC 11-747 QAS3A B C M F VI V NOM. RV/L  
 (YES/NO) ☐ DATA NOT AVAILABLE  
 (YES/NO) ☒ ARC 11-747 QAS3A B C M F VI V NOM. RV/L

ALPHA RUDDER BOFLAP SPOBRK  
 .000 .000 -11.700 55.000  
 10.000 .000 -11.700 55.000  
 20.000 .000 -11.700 55.000

REFERENCE INFORMATION  
 SREF 2.4210 SQ.FT.  
 LREF 14.2440  
 DREF 28.1000  
 YMRP 32.3010  
 ZMRP .0000  
 SCALE 11.0000  
 SCALE .0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR



SIDESLIP ANGLE, B

FIG. 5: RUDDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE  
 (COMACH - 1.20) PAGE 1080



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	REFLAP	SPODBRK	REFERENCE INFORMATION
(YEAJ25)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SC.1.1
(YEAJ26)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(YEAJ27)	ARC 11-747 OAS3A B C H F VI V	20.000	.000	-11.700	55.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300 SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR



FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(YEJAZ5)	ARC 11-747 D453A B C M F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ.F.T.
(YEJAZ6)	ARC 11-747 D453A B C M F VI V	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(YEJAZ7)	ARC 11-747 D453A B C M F VI V	20.000	.000	-11.700	55.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF .0000 IN.
						ZREF 11.2500 IN.
						SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

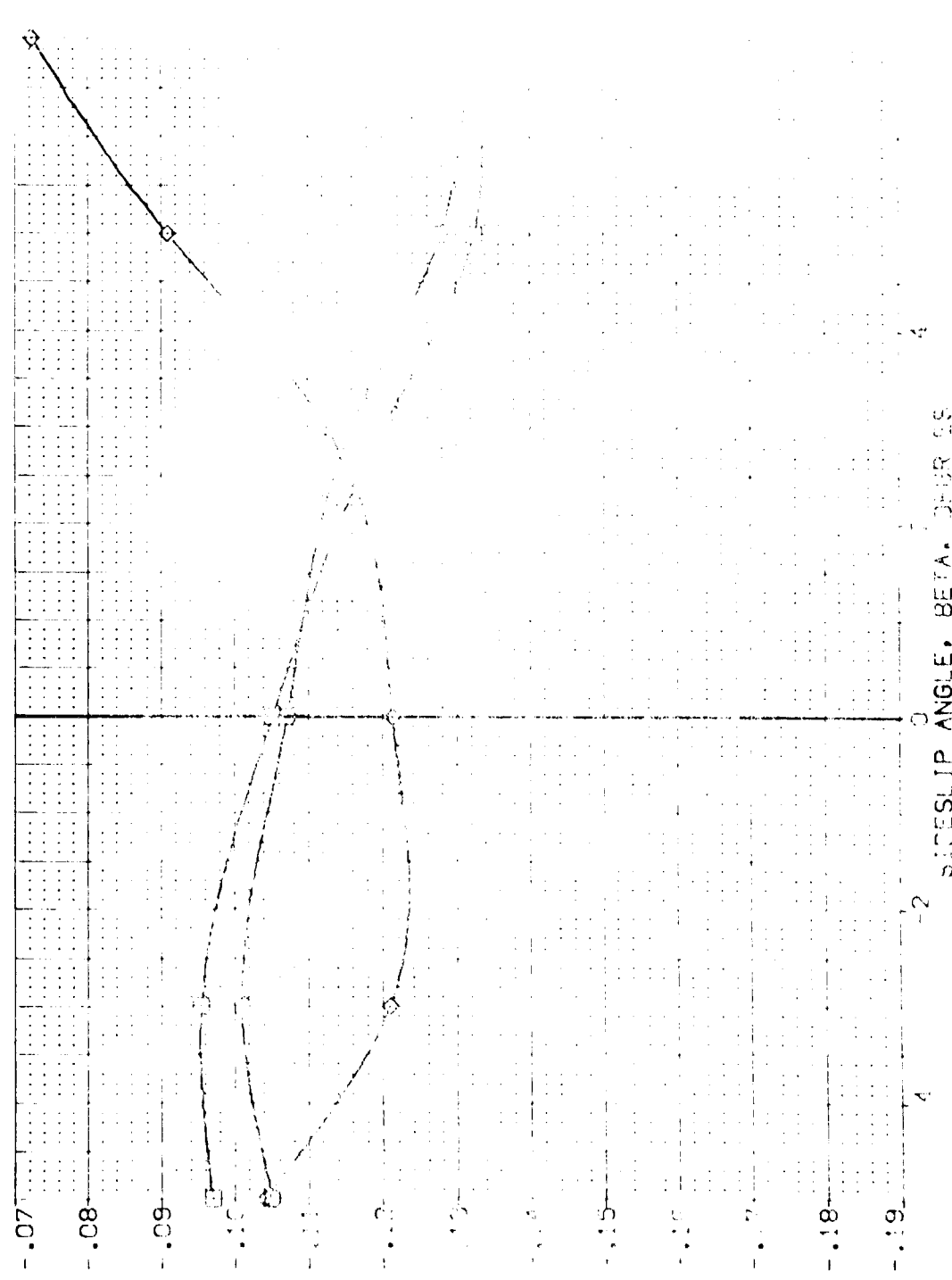


FIG. 51 RUDDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE, DEGREE  
(B)MACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(VEJAZ5)	ARC 11-747 OAS3A B C H F VI V	.000	.000	-11.700	55.000	SREF 2.4210 SQ. FT.
(VEJAZ6)	DATA NOT AVAILABLE	10.000	.000	-11.700	55.000	LREF 14.2440 IN.
(VEJAZ7)	ARC 11-747 OAS3A B C H F VI V	20.000	.000	-11.700	55.000	BREF 28.1004 IN.
						XMRP 32.2010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300

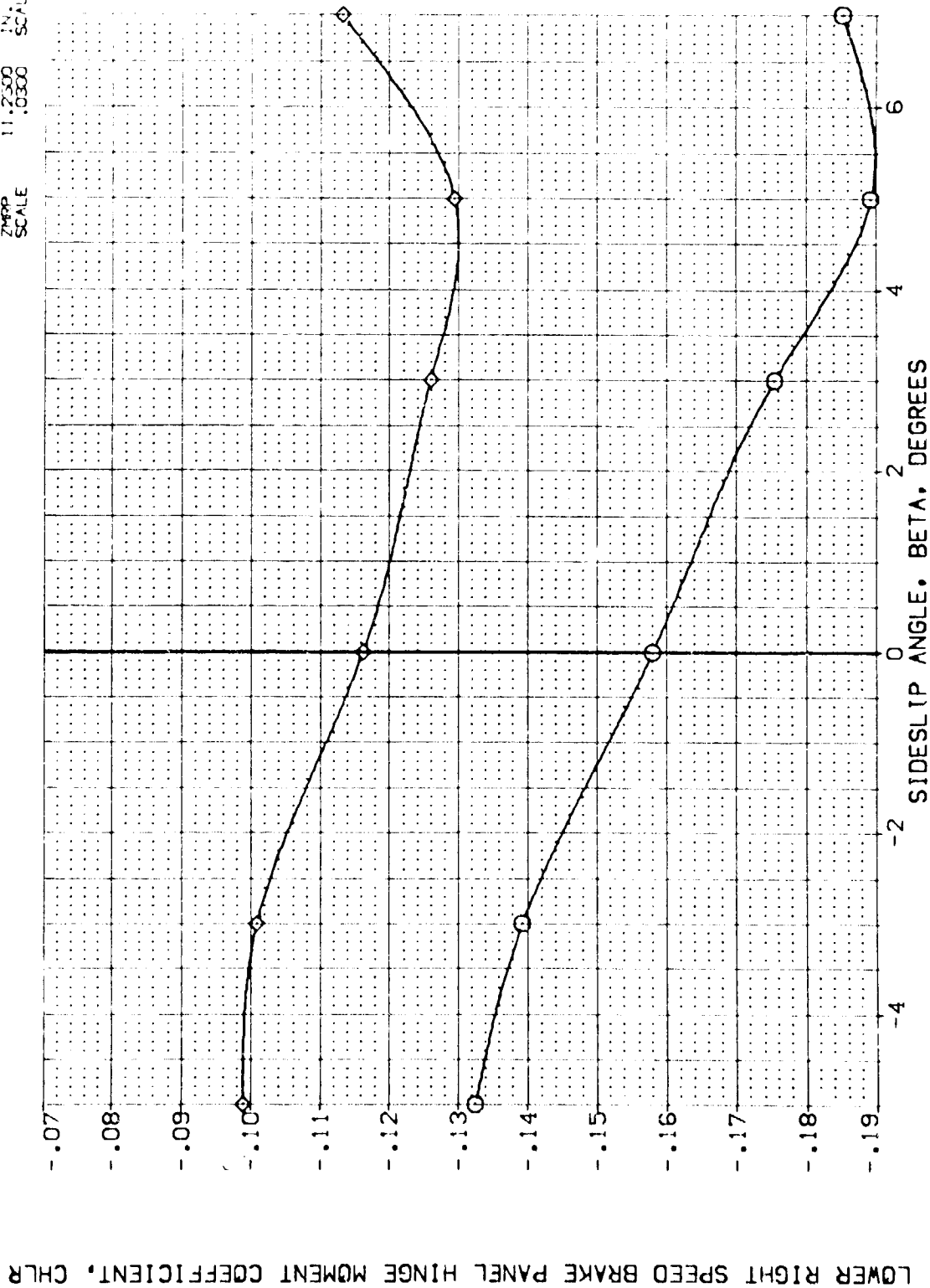


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = 1.20

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BOFLAP    SPEEDRY    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDRY	REFERENCE INFORMATION
(YEJ035)	ARC 11-747 DA53A B C H F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YEJ036)	ARC 11-747 DA53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(YEJ037)	ARC 11-747 DA53A B C H F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0000

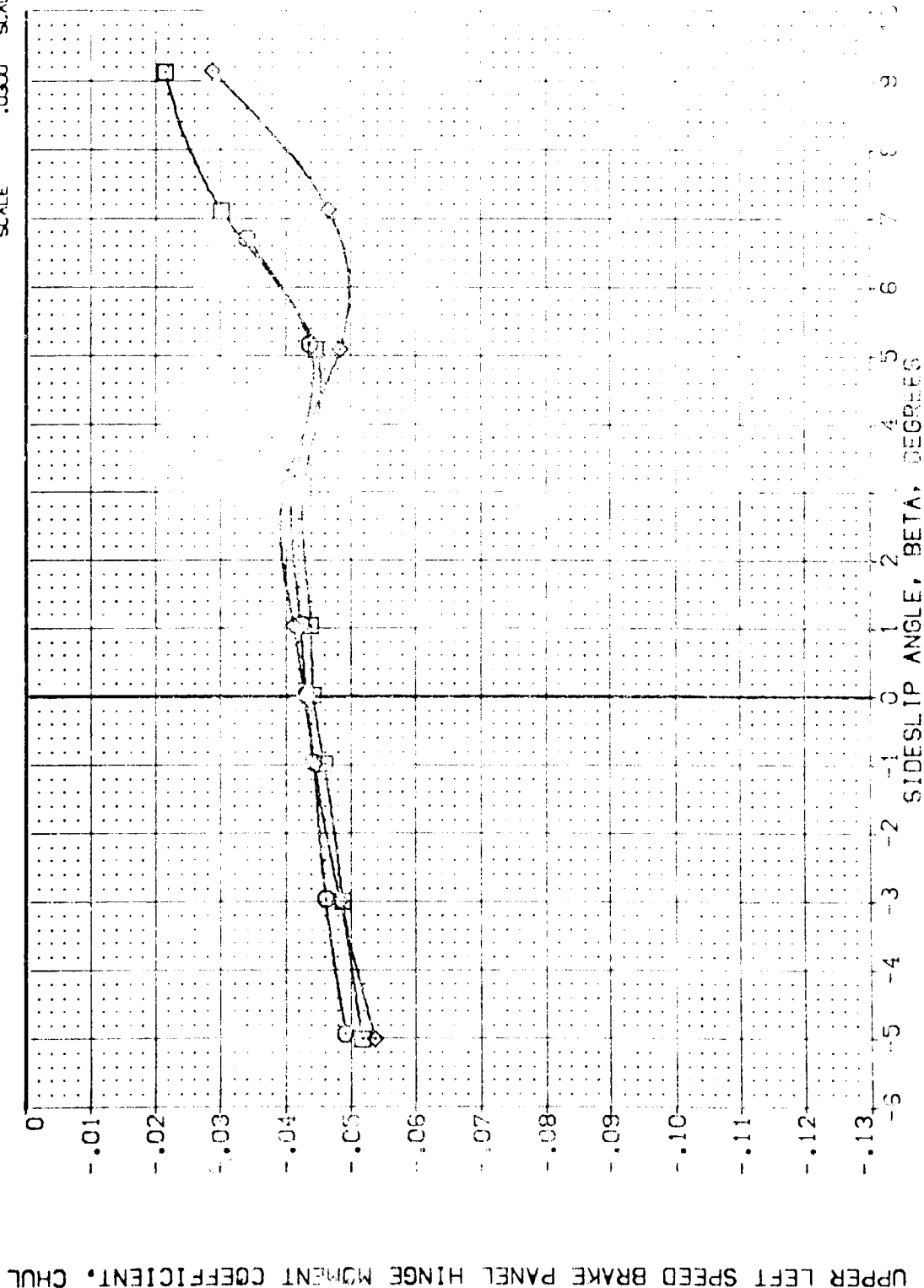


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (A)MACH = .60



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
VELOC35	APC -747 C-53A B C M F V	10.000	-0.000	-11.700	55.000	SREF 2.4213 SQ. FT.
VELOC36	APC -747 C-53A B C M F V	10.000	-0.000	-11.700	55.000	LPREF 14.2443
VELOC37	APC -747 C-53A B C M F V	20.000	-0.000	-11.700	55.000	BPREF 28.1004
						YREF 32.3010
						YREF 11.0000
						ZREF 11.2500
						SCALE .0000

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

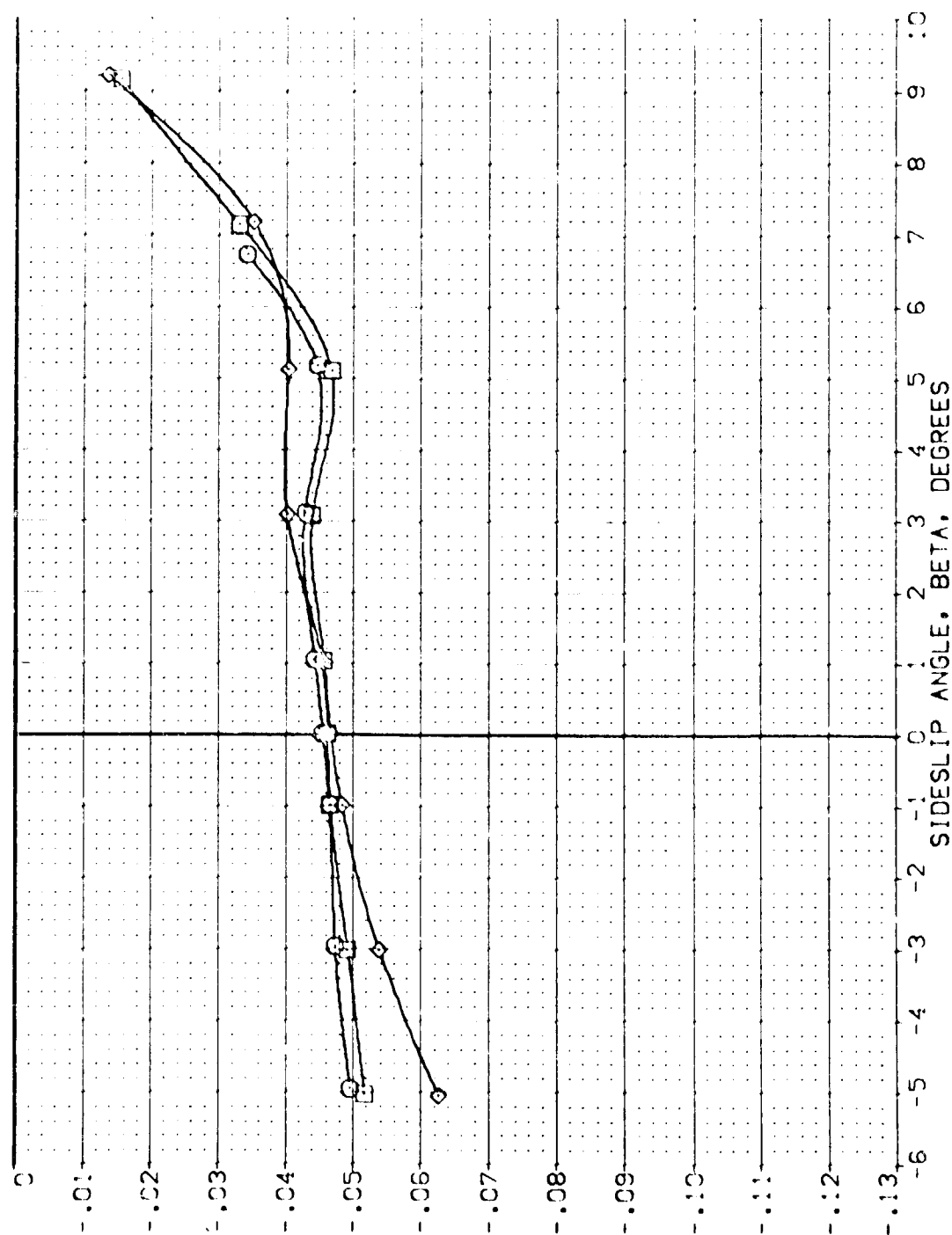


FIG. 5: RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BDF LAP SPEED BRAK REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	BDF LAP	SPEED BRAK	REFERENCE INFORMATION
[YEG035]	ARC 11-747	0A53A B C M F V I	0.000	-10.000	-11.700	55.000	SREF 2.4210 SGREF 1.0
[YEG036]	ARC 11-747	0A53A B C M F V I	10.000	-10.000	-11.700	55.000	LREF 14.2440 LREF 1.0
[YEG037]	ARC 11-747	0A53A B C M F V I	20.000	-10.000	-11.700	55.000	BREF 28.1004 BREF 1.0
							YMRP 32.3010 YMRP 1.0
							ZMRP 11.2500 ZMRP 1.0
							SCALE .0350 SCALE



FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (C)MACH = .90  
 PAGE : 286

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(VE4035)	ABC 11-747 GA53A B C M F V	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VE4036)	ABC 11-747 GA53A B C M F V	10.000	-10.000	-11.700	55.000	LRPF 14.2440 IN.
(VE4037)	ABC 11-747 GA53A B C M F V	20.000	-10.000	-11.700	55.000	BRPF 28.1004 IN.
						YMRP 32.3010 IN.
						ZMRP 11.2000 IN.
						SCALE .0000
						SCALE .0000

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

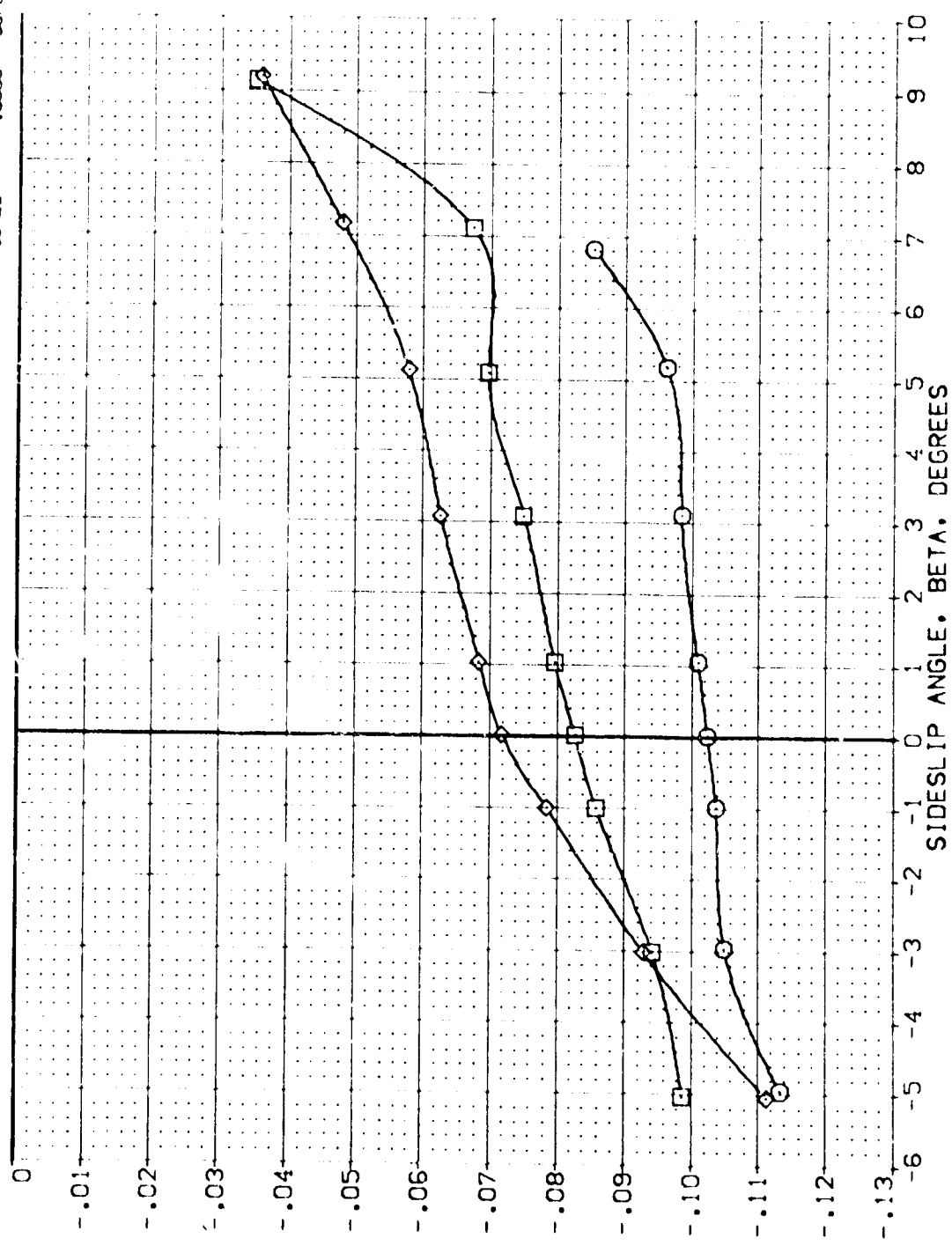


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YEA035)	ARC 11-747 0A53A B C M F V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YEA036)	ARC 11-747 0A53A B C M F V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(YEA037)	ARC 11-747 0A53A B C M F V	20.000	-10.000	-11.700	55.000	BREF 28.1064 IN.
						XREF 32.3010 IN.
						YREF 11.2500 IN.
						ZREF 11.2500 IN.
						SCALE 1.0000

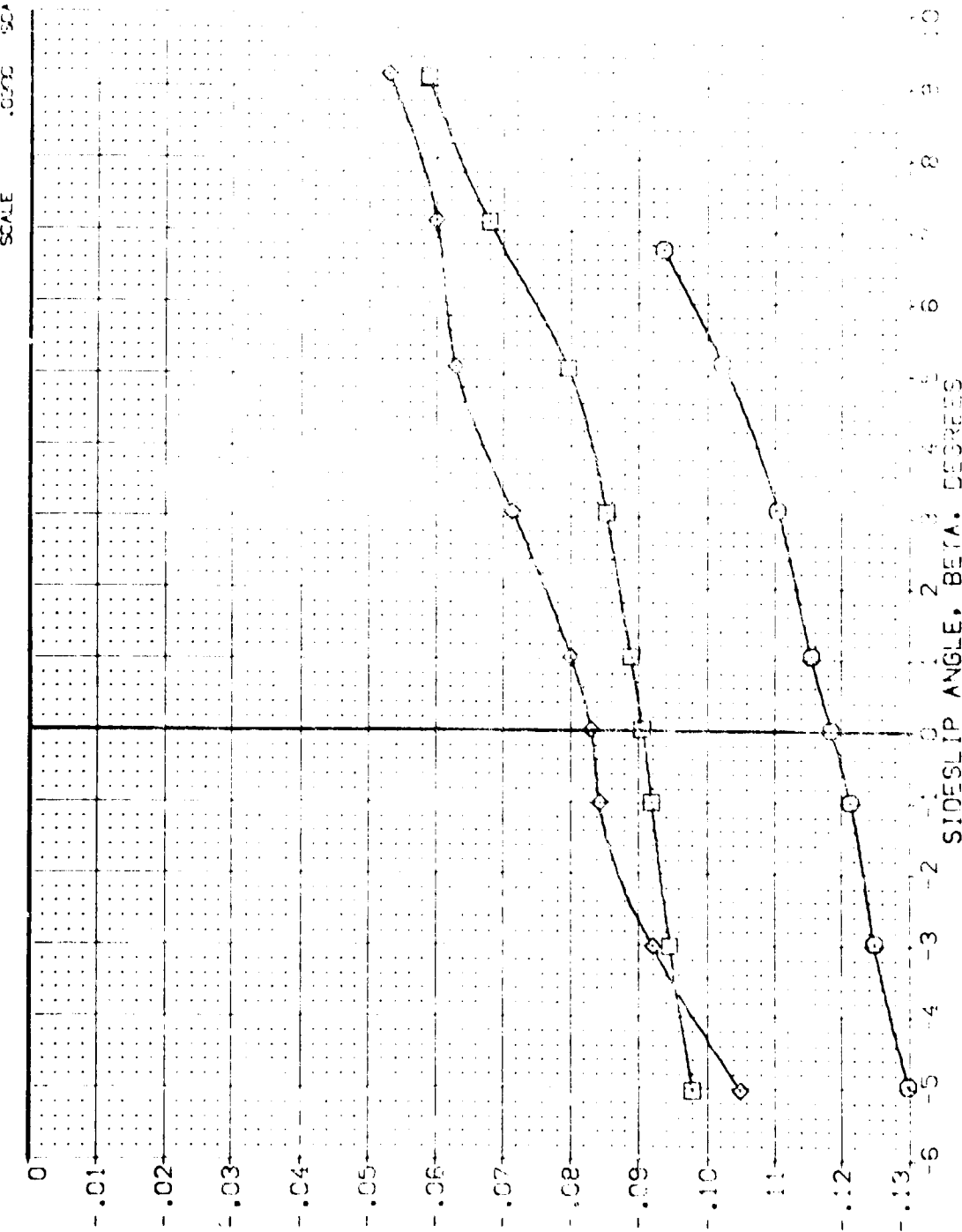


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(CDMACH = 1.20

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DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	DOE LAP	SPEEDBRAKE	REFERENCE INFORMATION
(YE1033)	ARC 11-747 CAS3A B C M F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YE1036)	ARC 11-747 CAS3A B C M F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(YE1037)	ARC 11-747 CAS3A B C M F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						YREF 32.3010 IN.
						ZREF 0.0000 IN.
						WREF 11.2500 IN.
						SCALE 0.0300

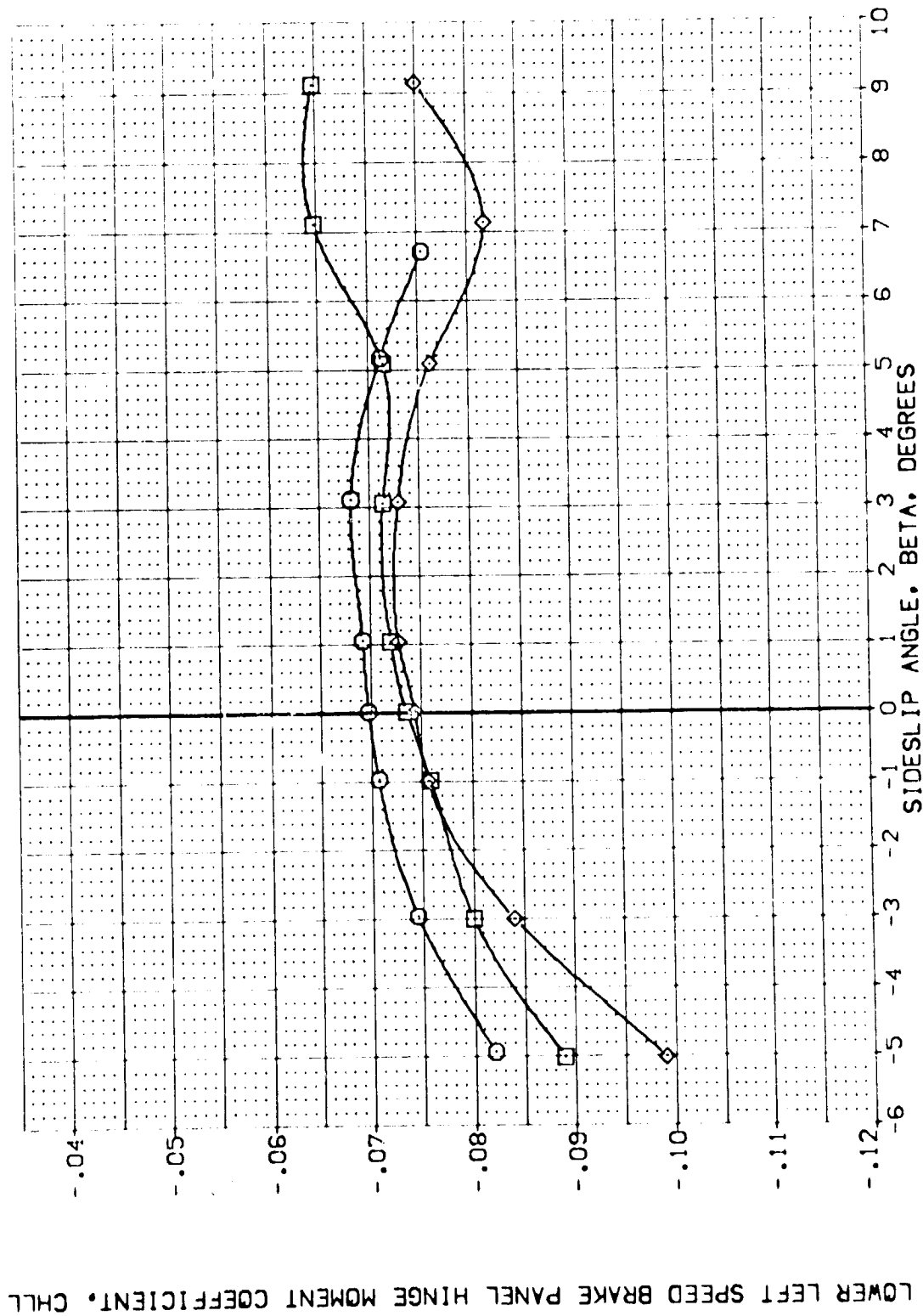


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(A)MACH = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOFLAP SPEED REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YEJ035)	ARC 11-747 OAS3A B C H F VI V	0.00	-10.00	-11.70	55.000	SREF 2.4210 SCAL T.
(YEJ036)	ARC 11-747 OAS3A B C H F VI V	10.00	-10.00	-11.70	55.000	LREF 14.2440 IN.
(YEJ037)	ARC 11-747 OAS3A B C H F VI V	20.00	-10.00	-11.70	55.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 0.0000 IN.
						ZREF 11.2500 IN.
						SCALE 0.0300 SCALE

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

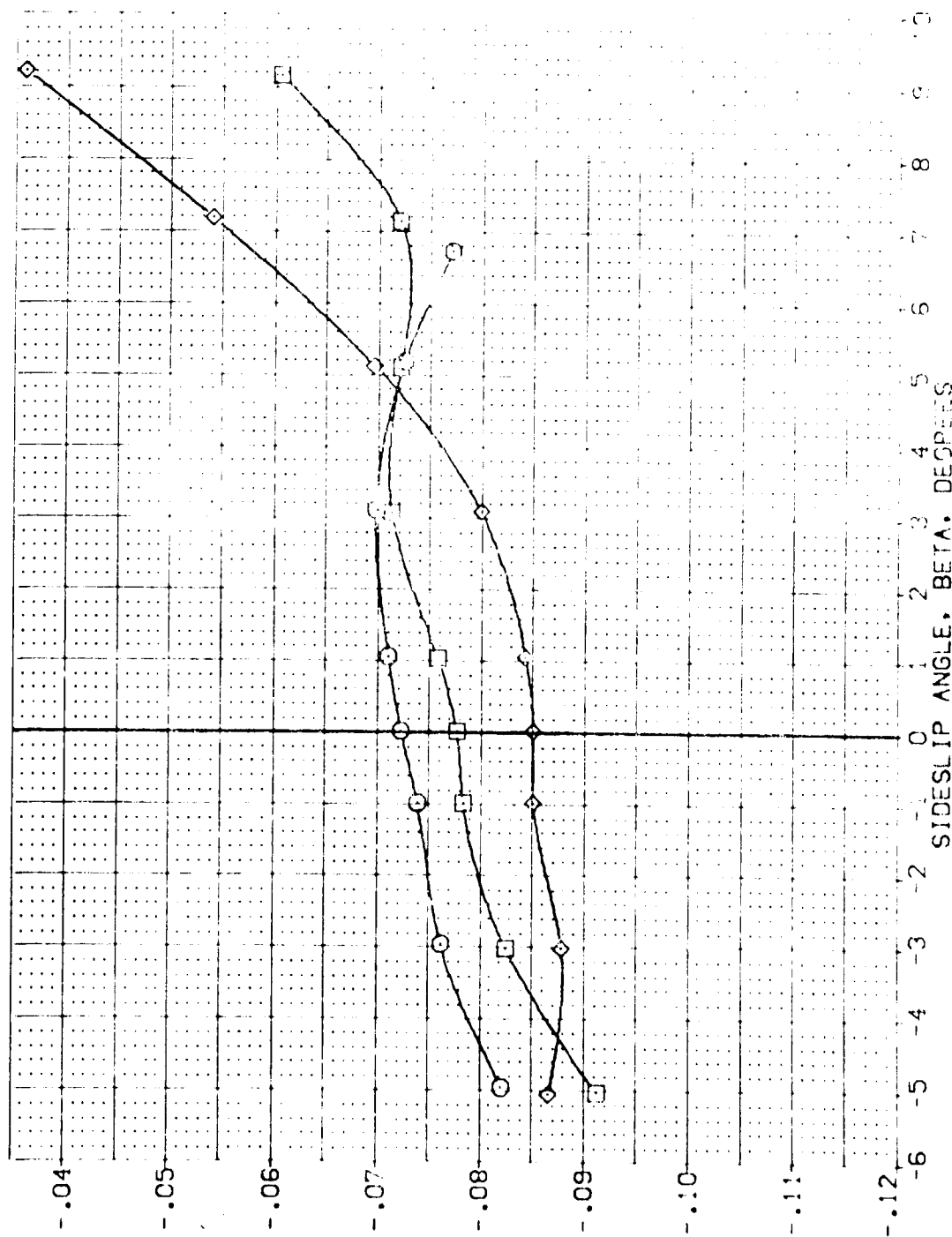


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	EDFLAP	SPOBRK	REFERENCE INFORMATION
[YE4035]	ARC 11-747 0A53A B C H F VI V	0.00	-10.000	-11.700	55.000	SREF 2.4210 50.0 FT.
[YE4036]	ARC 11-747 0A53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[YE4037]	ARC 11-747 0A53A B C H F VI V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						XMRP 32.3010 IN.
						YMRP 0.0000 IN.
						ZMRP 11.2500 IN.
						SCALE 0.0000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

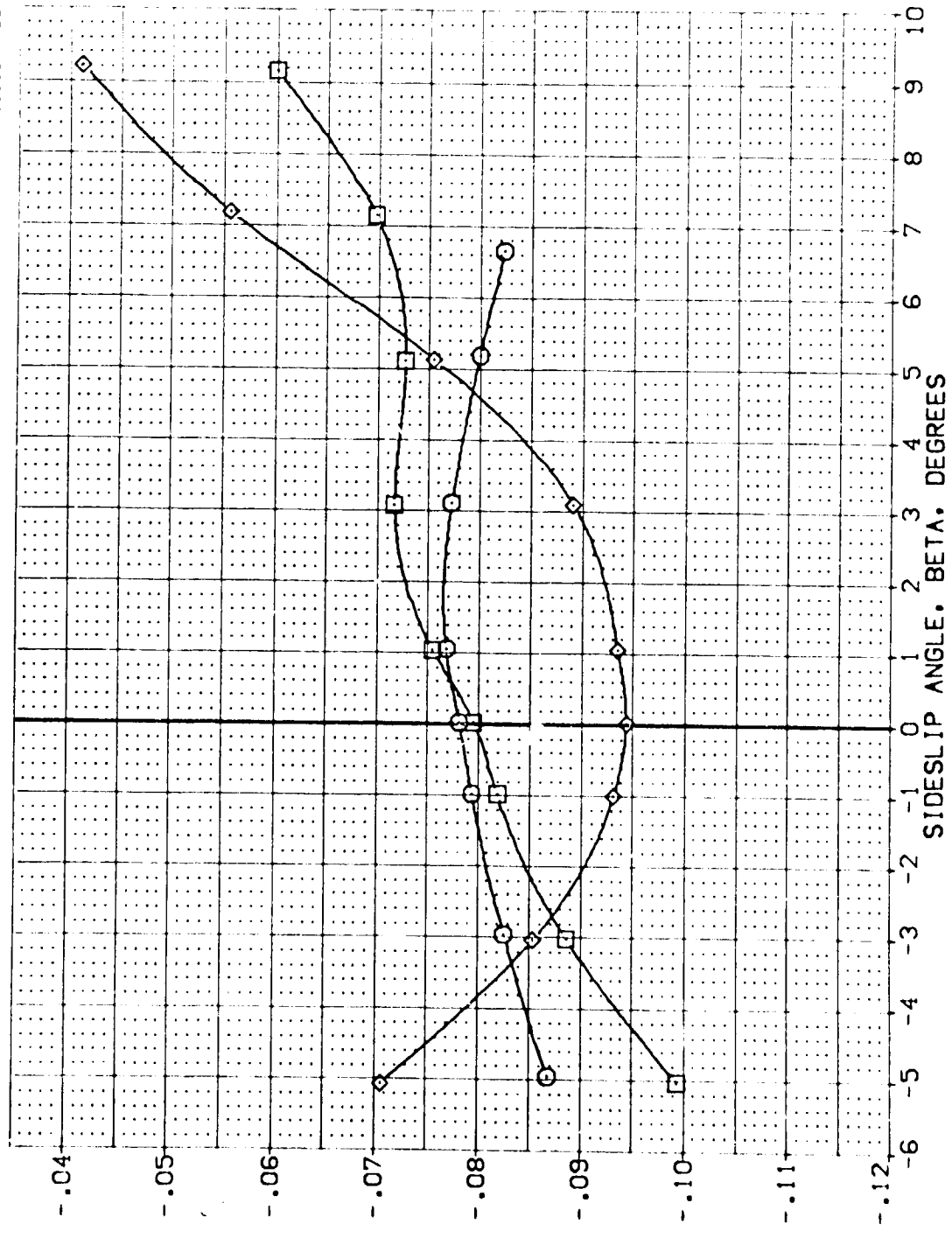


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = .90

DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	ARC	11-747	DA53A	B	C	M	F	V	NOM	RV/L	ALPHA	RUDDER	BO/LAP	SPEED	REFERENCE INFORMATION
(YEJ005)	ARC	11-747	DA53A	B	C	M	F	V	NOM	RV/L	0.000	-10.000	-11.700	55.000	SREF 2.4210
(YEJ006)	ARC	11-747	DA53A	B	C	M	F	V	NOM	RV/L	10.000	-10.000	-11.700	55.000	LREF 14.2243
(YEJ007)	ARC	11-747	DA53A	B	C	M	F	V	NOM	RV/L	20.000	-10.000	-11.700	55.000	BREF 28.1604
															XREF 32.5010
															YREF 11.2572
															ZREF 11.2572
															SCALE 10500

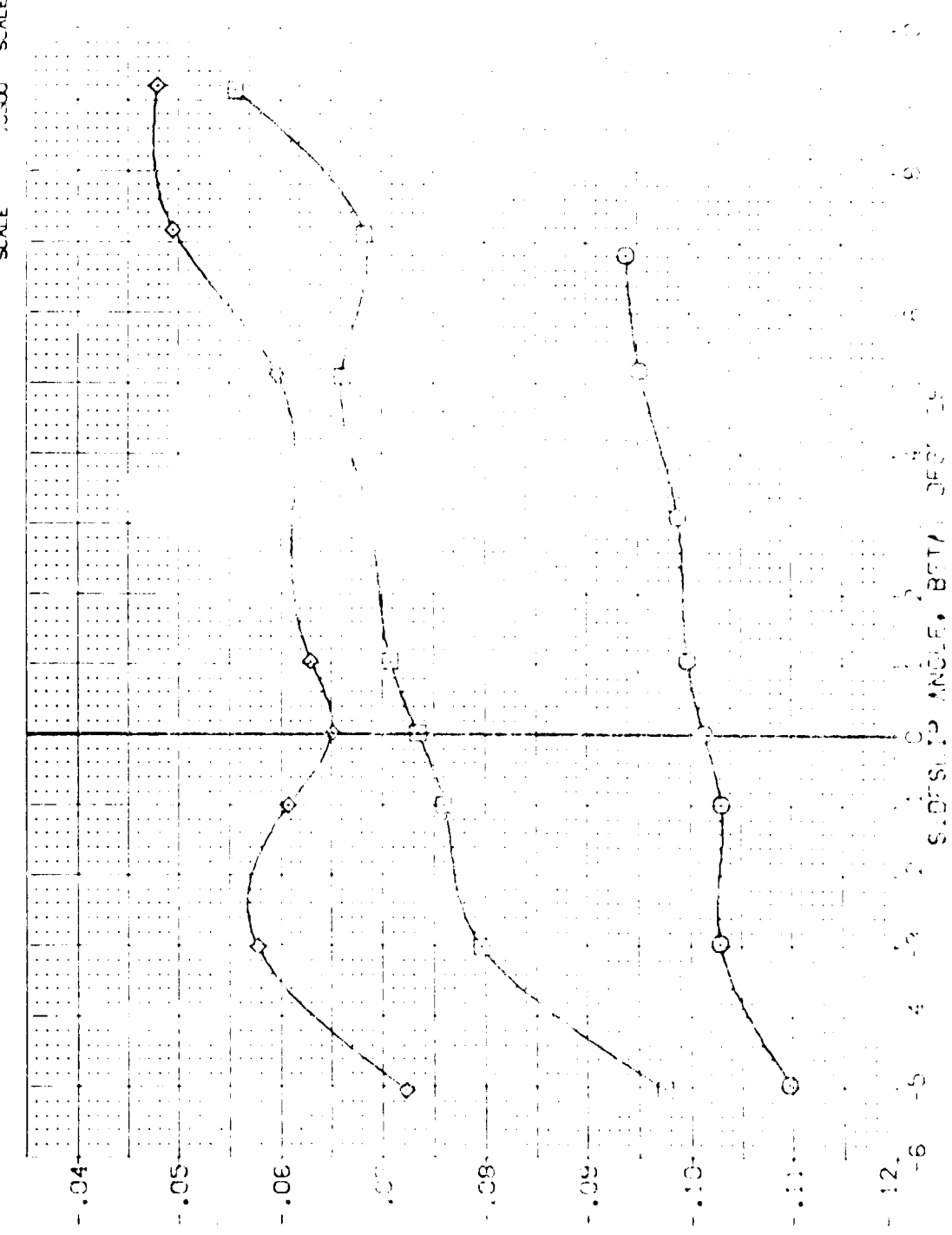


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANG L. SPEED 55 DEGREES  
 (C)MACH = 1.05  
 PAGE 1292

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL





DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(YE4035)	ARC 11-747 D453A B C M F V1 V	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YE4036)	ARC 11-747 D453A B C M F V1 V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(YE4037)	ARC 11-747 D453A B C M F V1 V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						XREF 32.3010 IN.
						YREF 11.2000 IN.
						ZREF 11.2000 IN.
						SCALE .0000

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

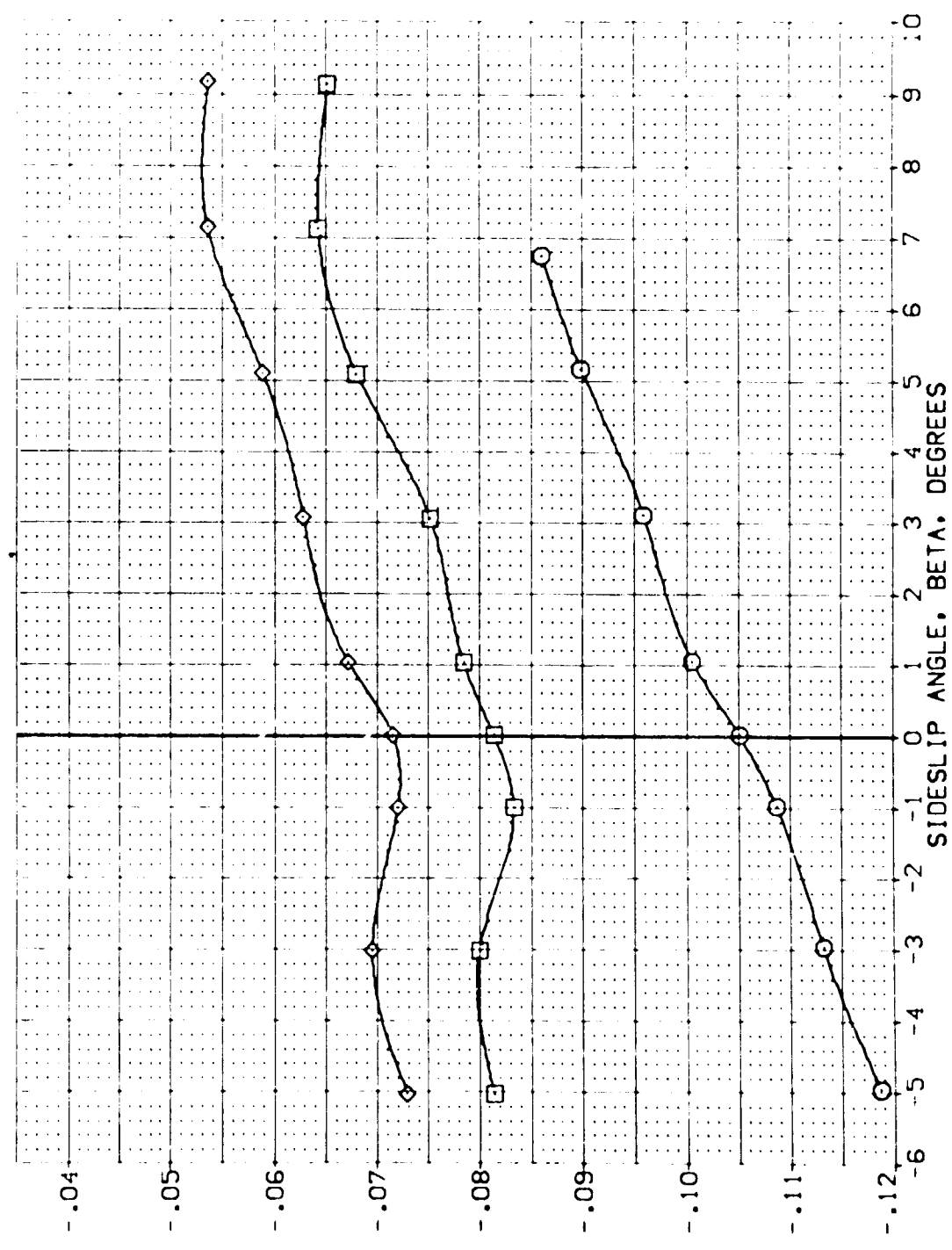


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(E)MACH = 1.20

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    BDFLAP    SPEEDBRK    REFERENCE INFORMATION

(YEJ005)	ARC 11-747 BA53A B C H F VI V	0.000	-10.000	-11.700	55.000	SREF	2.4210
(YEJ006)	ARC 11-747 BA53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF	14.2440
(YEJ037)	ARC 11-747 BA53A B C H F VI V	20.000	-10.000	-11.700	55.000	BREF	28.1000
						XMPP	32.3010
						YMPP	.0000
						ZMPP	11.2500
						SCALE	1.0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT - CHUR

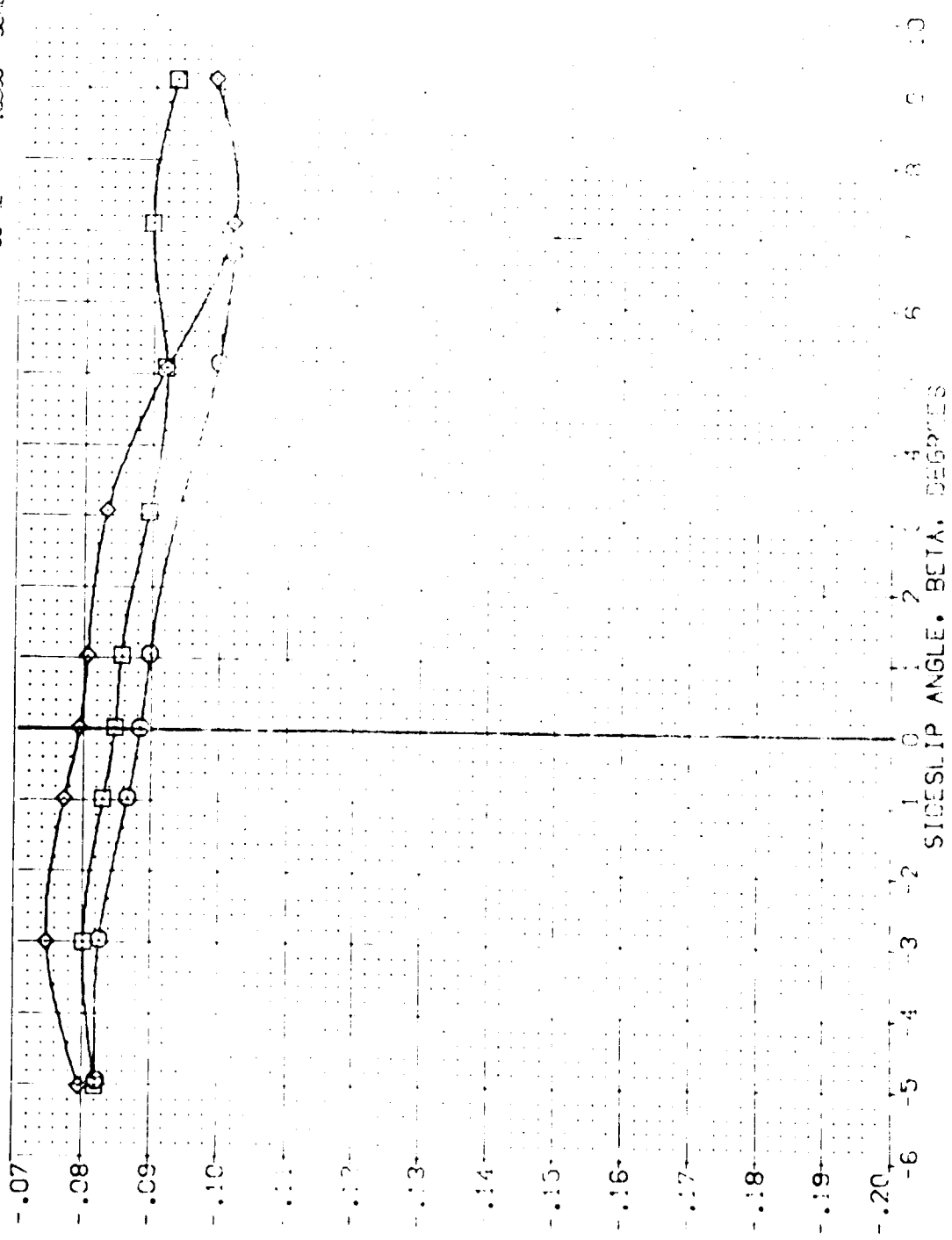


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE - SPEEDBRAKE - 55 DEGREES  
(ADMACH = .60) PAGE 1294



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDER	BOLAP	SPOBRK	REFERENCE INFORMATION
[YE-036]	ARC 11-747 GA53A B C M F V1 V	.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[YE-036]	ARC 11-747 GA53A B C M F V1 V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
[YE-037]	ARC 11-747 GA53A B C M F V1 V	20.000	-10.000	-11.700	55.000	BREF 28.1004 IN.
						XPRP 32.3019 IN.
						YMRP .0000 IN.
						ZMRP 11.2500 IN.
						SCALE .0300 SCALE

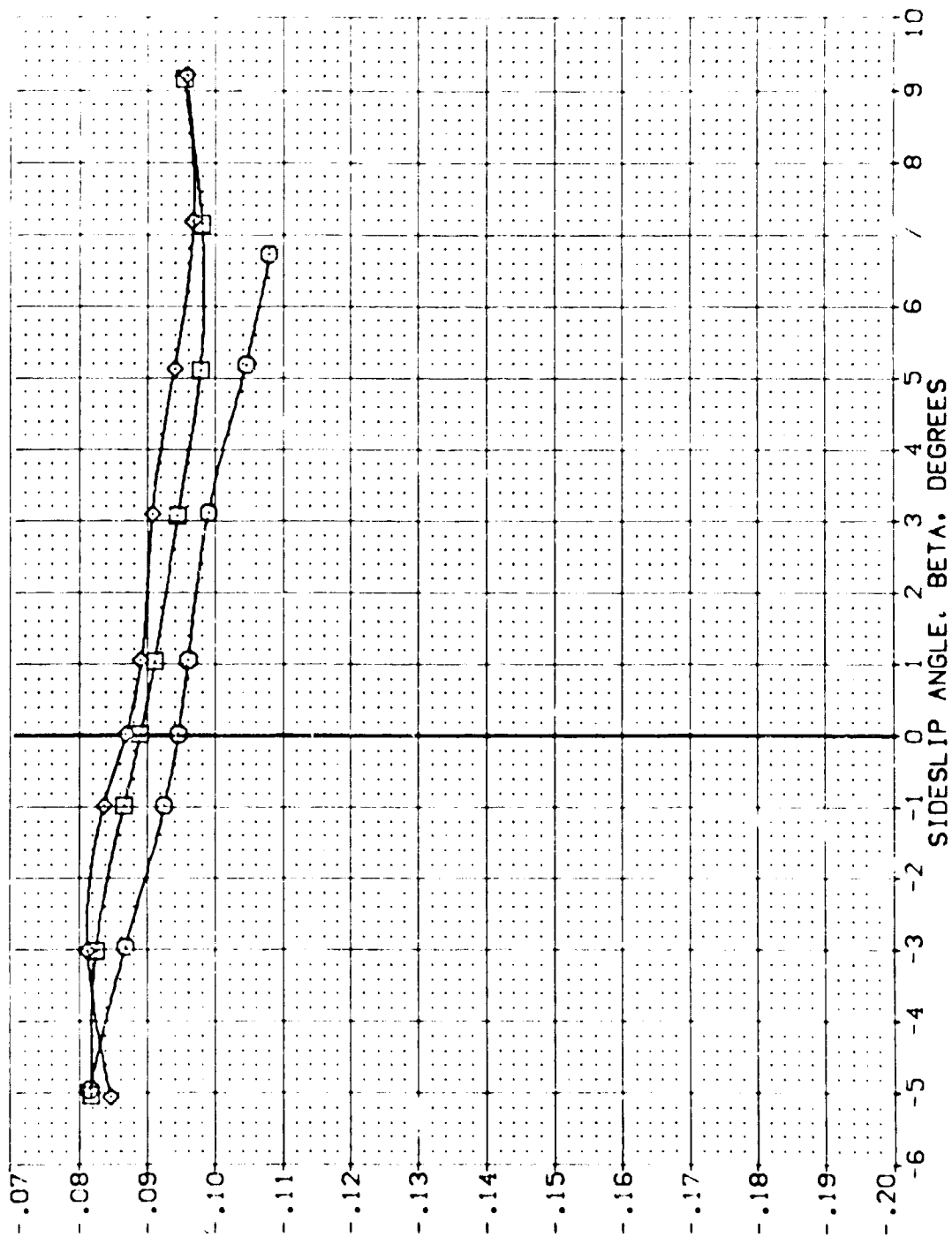


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE. SPEEDBRAKE = 55 DEGREES  
(B)MAC = .80 PAGE 1295

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET	SYMBOL	CONFIGURATION	DESCRIPTION	REFERENCE INFORMATION
VE-035	Q	ARC 11-747	QAS3A B C M F V	SREF 2.4210 SQ. FT.
VE-036	Q	ARC 11-747	QAS3A B C M F V	LREF 14.2440
VE-037	Q	ARC 11-747	QAS3A B C M F V	BREF 28.1000
				XREF 32.3000
				YREF 0.0000
				ZREF 11.2500
				SCALE 0.0500

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

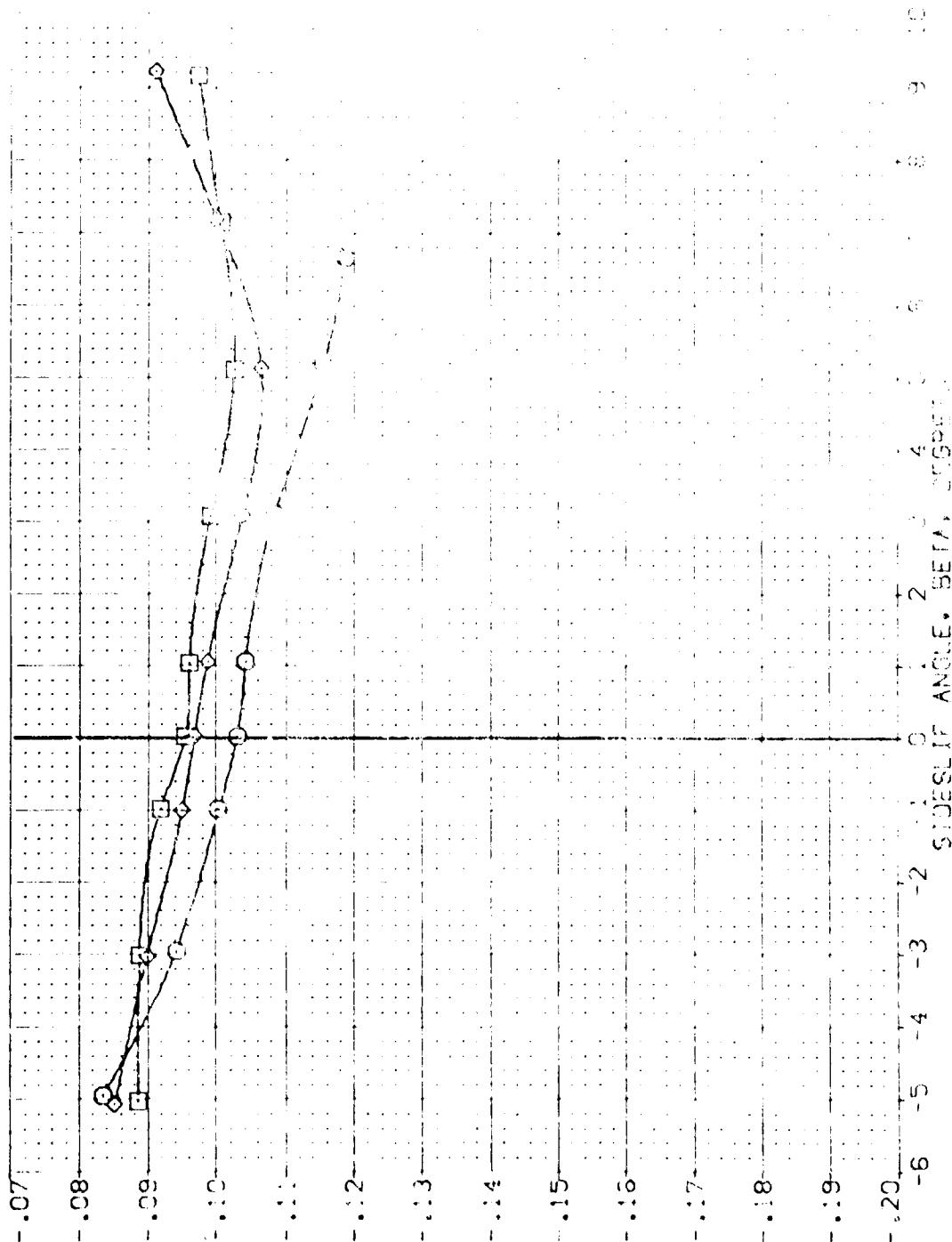


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE. SLEW ANGLE = 55 DEGREES

COMACH = .90

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
(VE-005)	ARC 11-747 0A53A B C H F VI V	0.000	-10.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VE-006)	ARC 11-747 0A53A B C H F VI V	10.000	-10.000	-11.700	55.000	LREF 14.2440 IN.
(VE-007)	ARC 11-747 0A53A B C H F VI V	20.000	-10.000	-11.700	55.000	DRREF 28.1004 IN.
						AMREF 32.2010 IN.
						YMPREF 11.0000 IN.
						ZMPREF 11.0000 IN.
						SCALE .0003

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

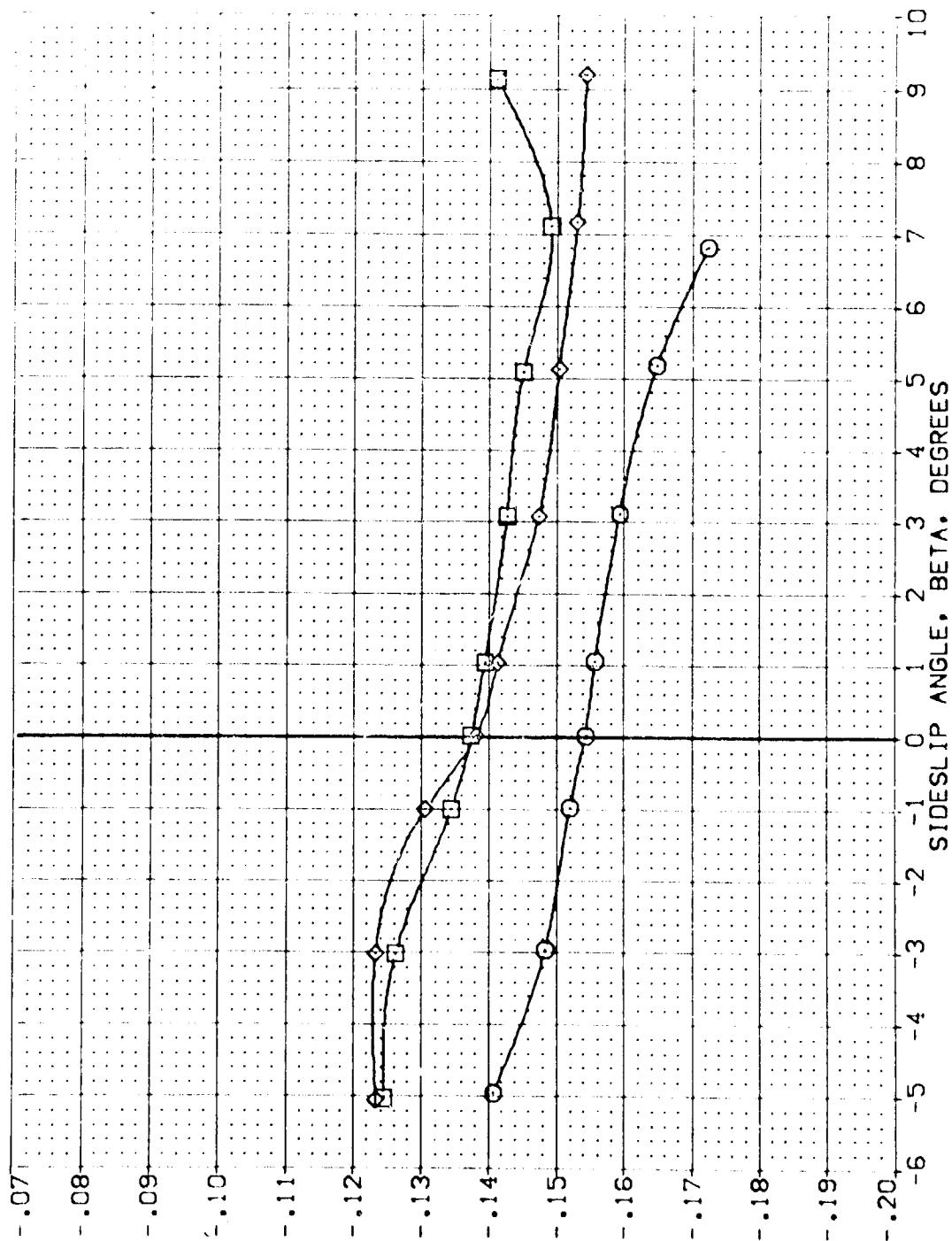


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(C)MACH = 1.05

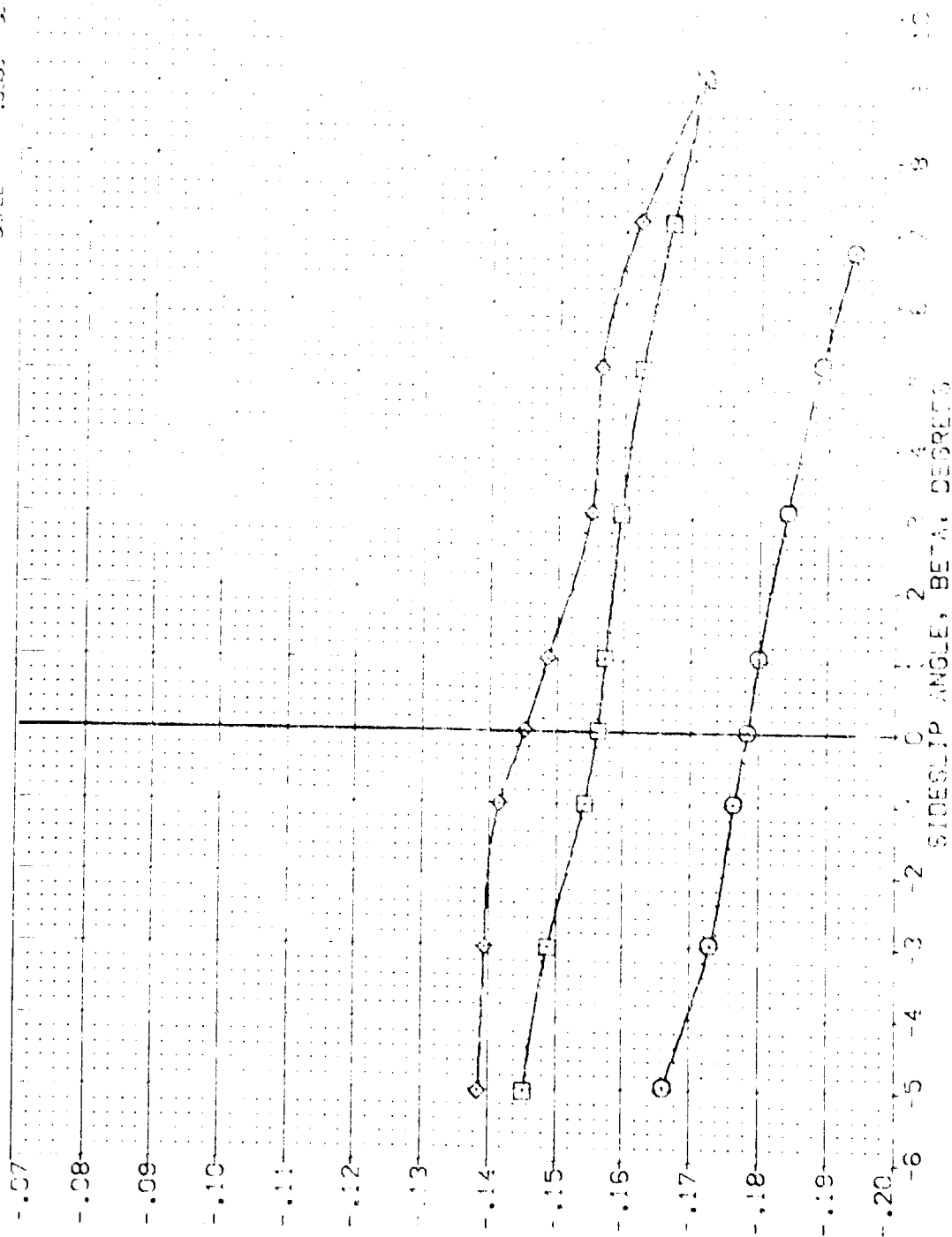
[illegible]

FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE - 55 DEGREES  
CEMAC- = :.20  
PAGE : 298

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
14-035	ABC 11-747 2A53A B C M F V	0.00	-10.000	-11.700	55.000	SCALE 2.4210 SCALE
14-036	ABC 11-747 2A53A B C M F V	10.000	-10.000	-11.700	55.000	SCALE 14.2440
14-037	ABC 11-747 2A53A B C M F V	20.000	-10.000	-11.700	55.000	SCALE 28.1000
					1000	SCALE 32.0000
					1000	SCALE 11.2000
					1000	SCALE 11.0000

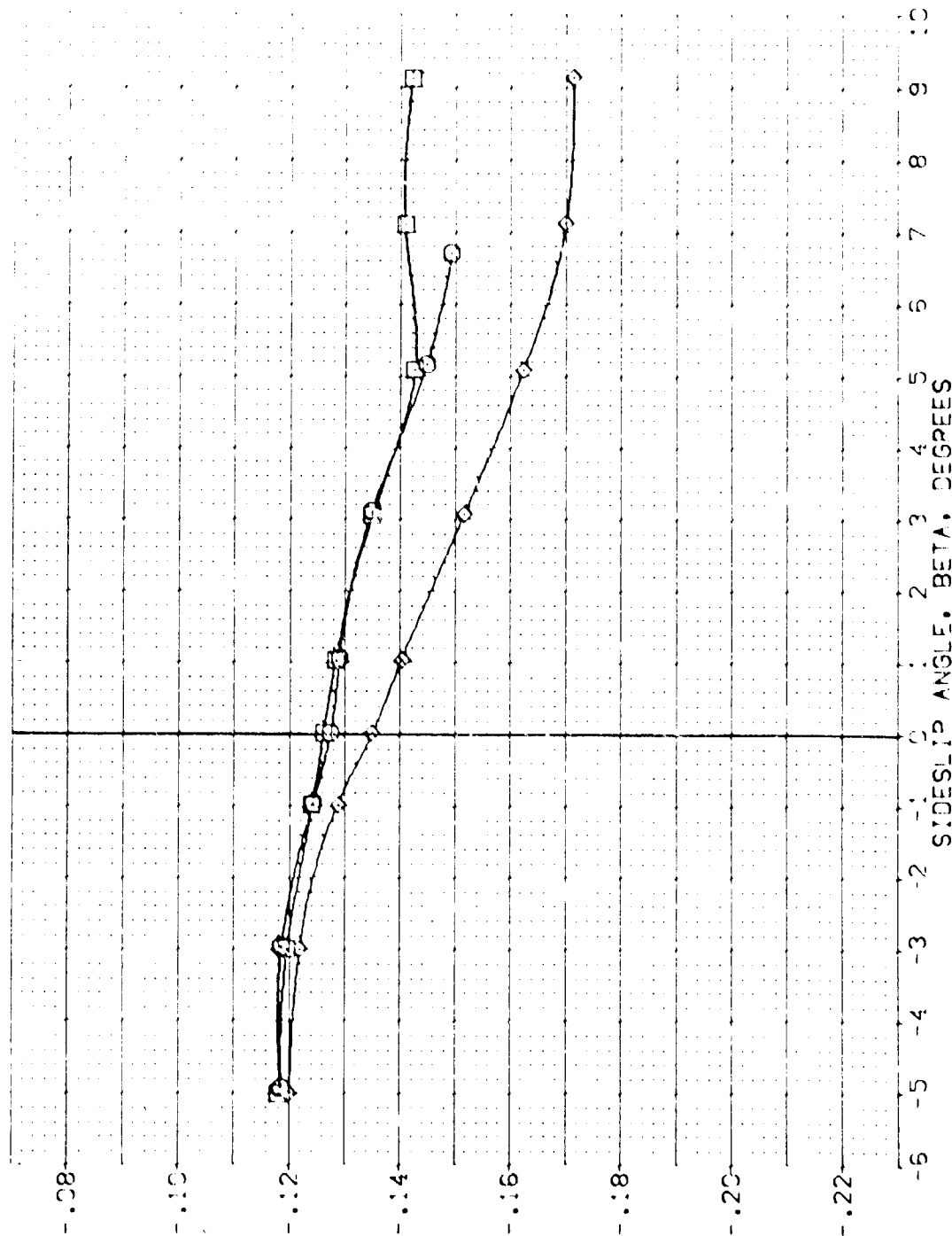


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(A)MAC = .60

DATA SET SYMBOL CONFIGURATION DESCRIPTION ALPHA RUDDER BOFLAP SPOBRK REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VEJ035)	ARC 11-747 QAS3A B C H F VI V	.000	-10.000	-11.700	55.000	SPREF 2.4210 SQ. FT.
(VEJ036)	ARC 11-747 QAS3A B C H F VI V	10.000	-10.000	-11.700	55.000	LPREF 14.2440
(VEJ037)	ARC 11-747 QAS3A B C H F VI V	20.000	-10.000	-11.700	55.000	BPREF 28.1004
						XPREF 32.3010
						YMPREF .0000
						ZMPREF 11.2720
						SCALE .0300

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

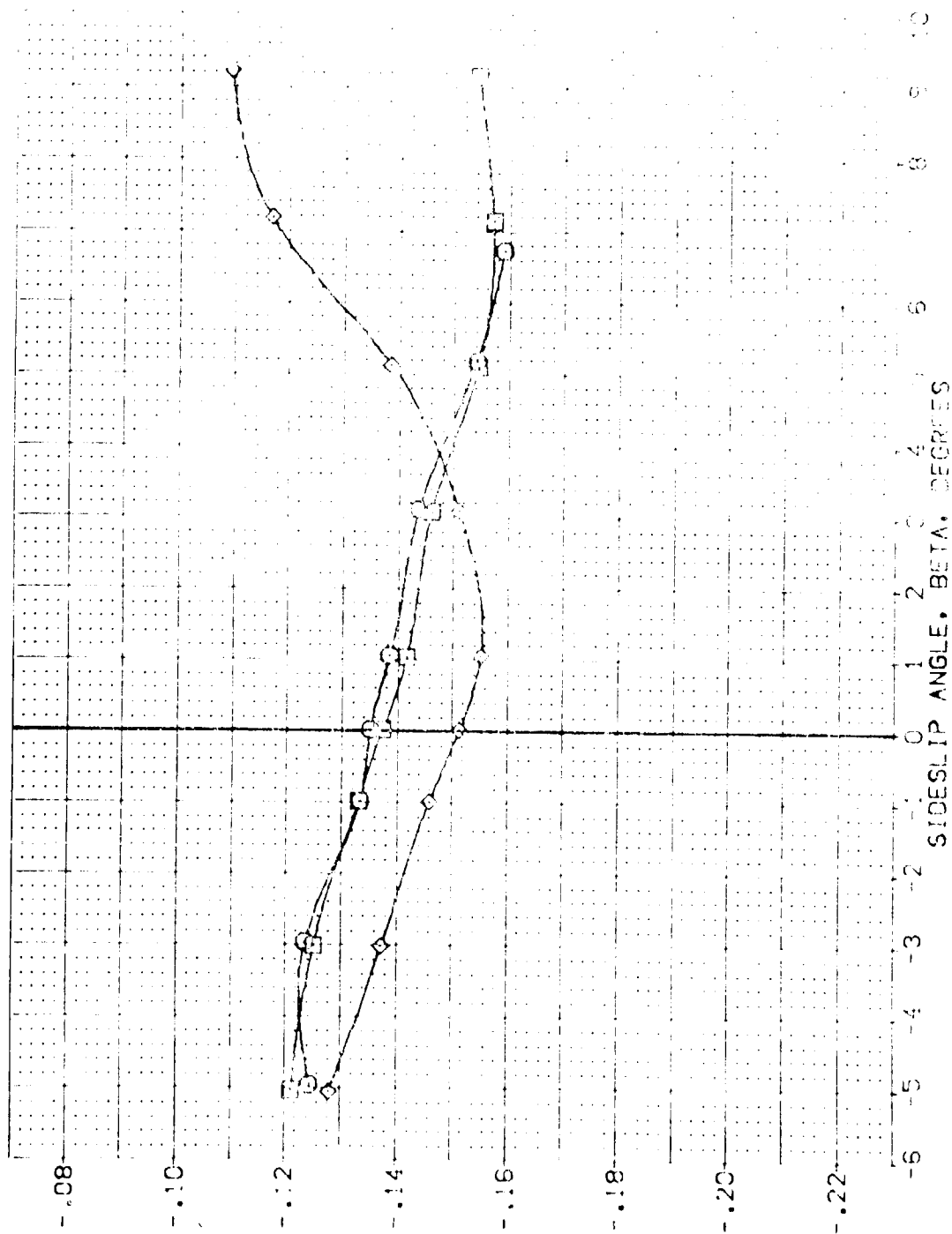


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANG. - SPEEDBRAKE = 55 DEGREES  
(B)MACH = .80 PAGE 1300



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPOBRK	REFERENCE INFORMATION
(VE1035)	ARC 11-747 CAS3A B C M F VI	0.000	-10.000	-11.700	55.000	SREF 2.42 0 50.0 FT.
(VE1036)	ARC 11-747 CAS3A B C M F VI	10.000	-10.000	-11.700	55.000	LREF 14.24 0 IN.
(VE1037)	ARC 11-747 CAS3A B C M F VI	20.000	-10.000	-11.700	55.000	BREF 28.10 0 IN.
						XREF 32.30 0 IN.
						YREF 0.000 IN.
						ZREF 11.25 0 IN.
						SCALE .03200

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

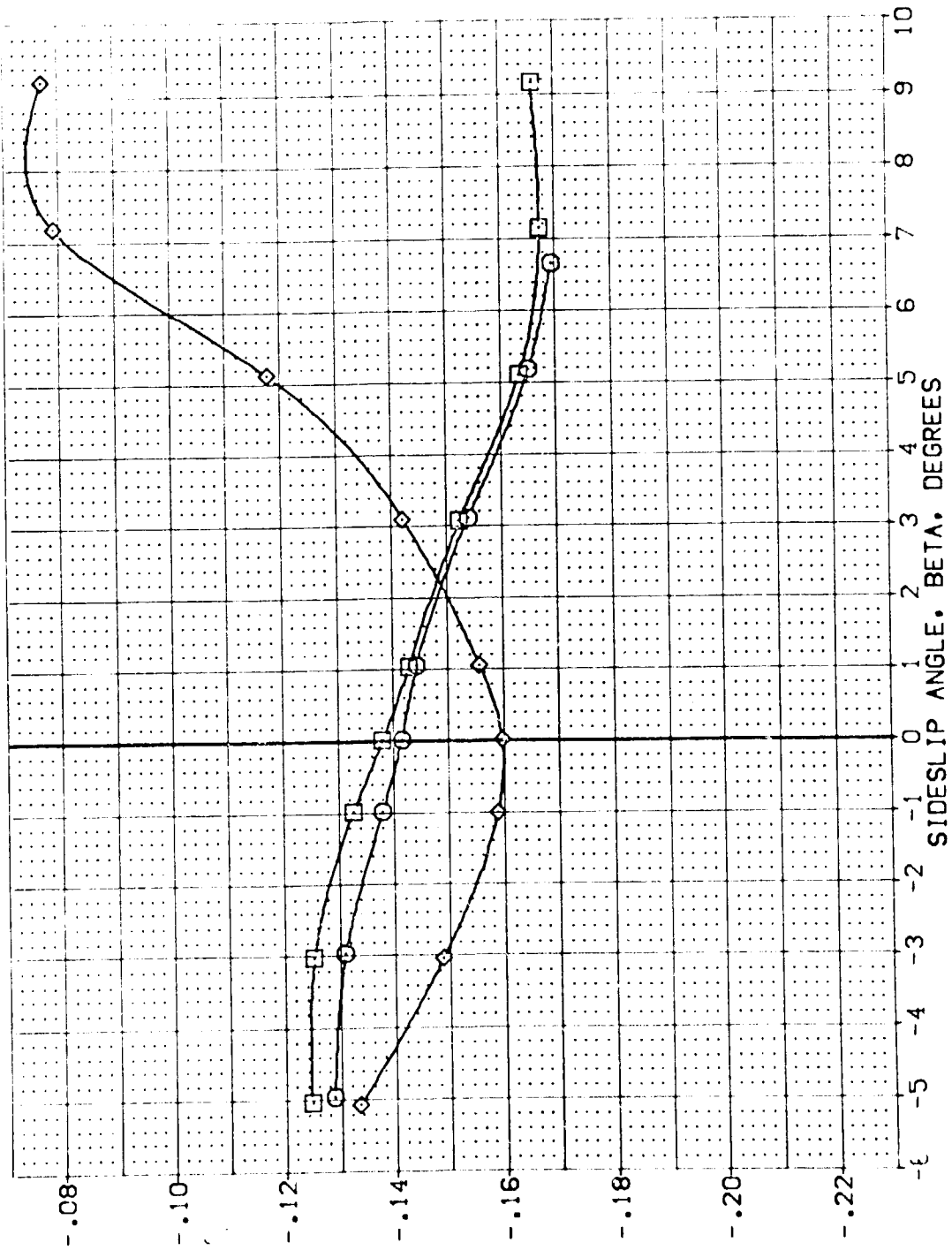


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = .90



LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RJDDER	SDCLAP	SPDRBM	REFERENCE INFORMATION
ABC	-747 D-53A B C M F V	0.00	-10.000	-11.700	55.000	2.425
ABC	-747 D-53A B C M F V	10.000	-10.000	-11.700	55.000	14.245
ABC	-747 D-53A B C M F V	20.000	-10.000	-11.700	55.000	26.125
						32.100
						40.000
						47.000
						52.000
						55.000

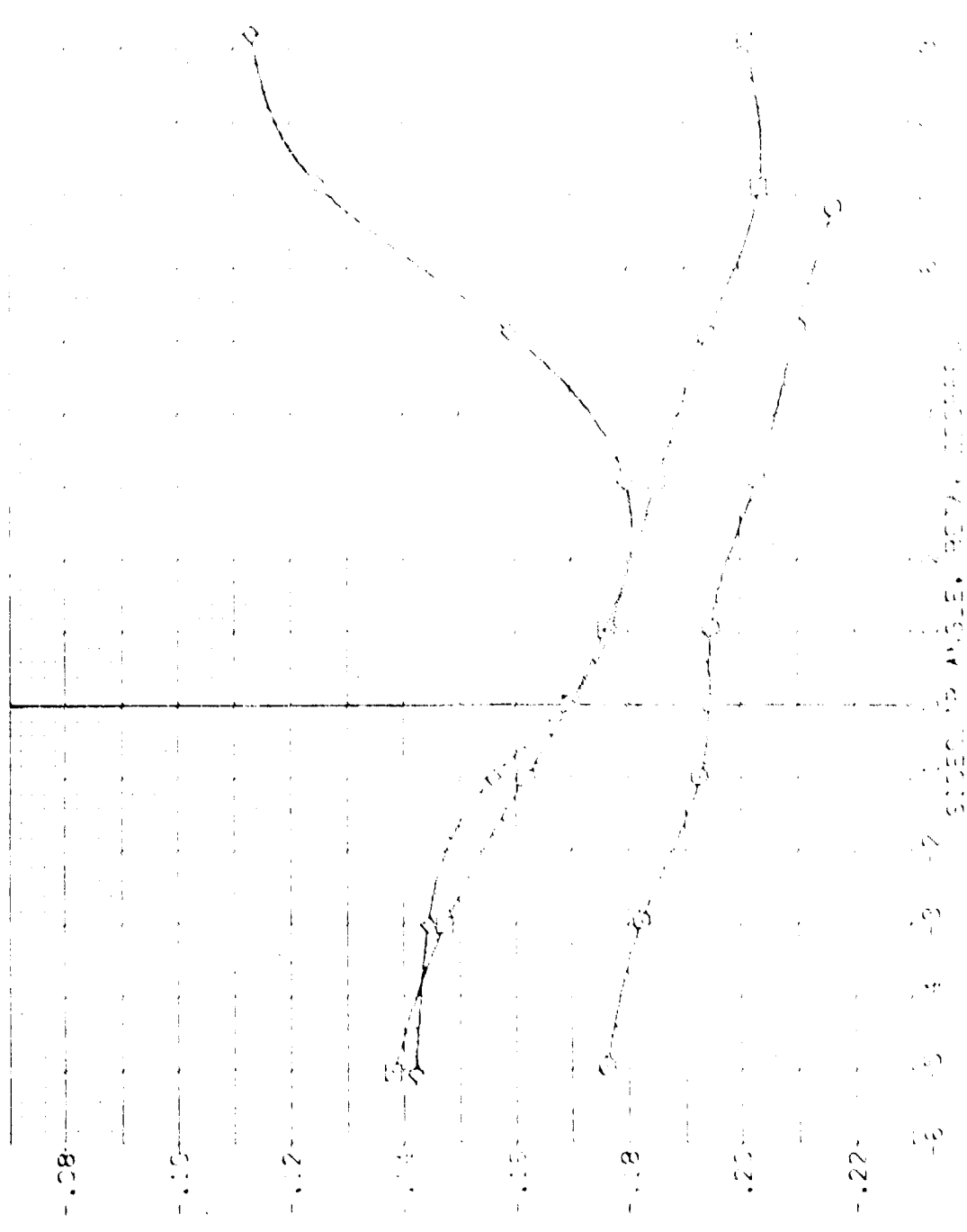


FIG. 5: PLOTTED PANEL HINGE MOMENT COEFFICIENT VERSUS SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
(YEL005)	ARC 11-747 G/S3A B C H F VI V	0.000	-10.000	-11.700	55.000	2.4210 SQ.FT.
(YEL036)	ARC 11-747 G/S3A B C H F VI V	10.000	-10.000	-11.700	55.000	14.2140 IN.
(YEL037)	ARC 11-747 G/S3A B C H F VI V	20.000	-10.000	-11.700	55.000	28.1004 IN.
						32.3010 IN.
						0.0000 IN.
						11.2500 IN.
						SCALE

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

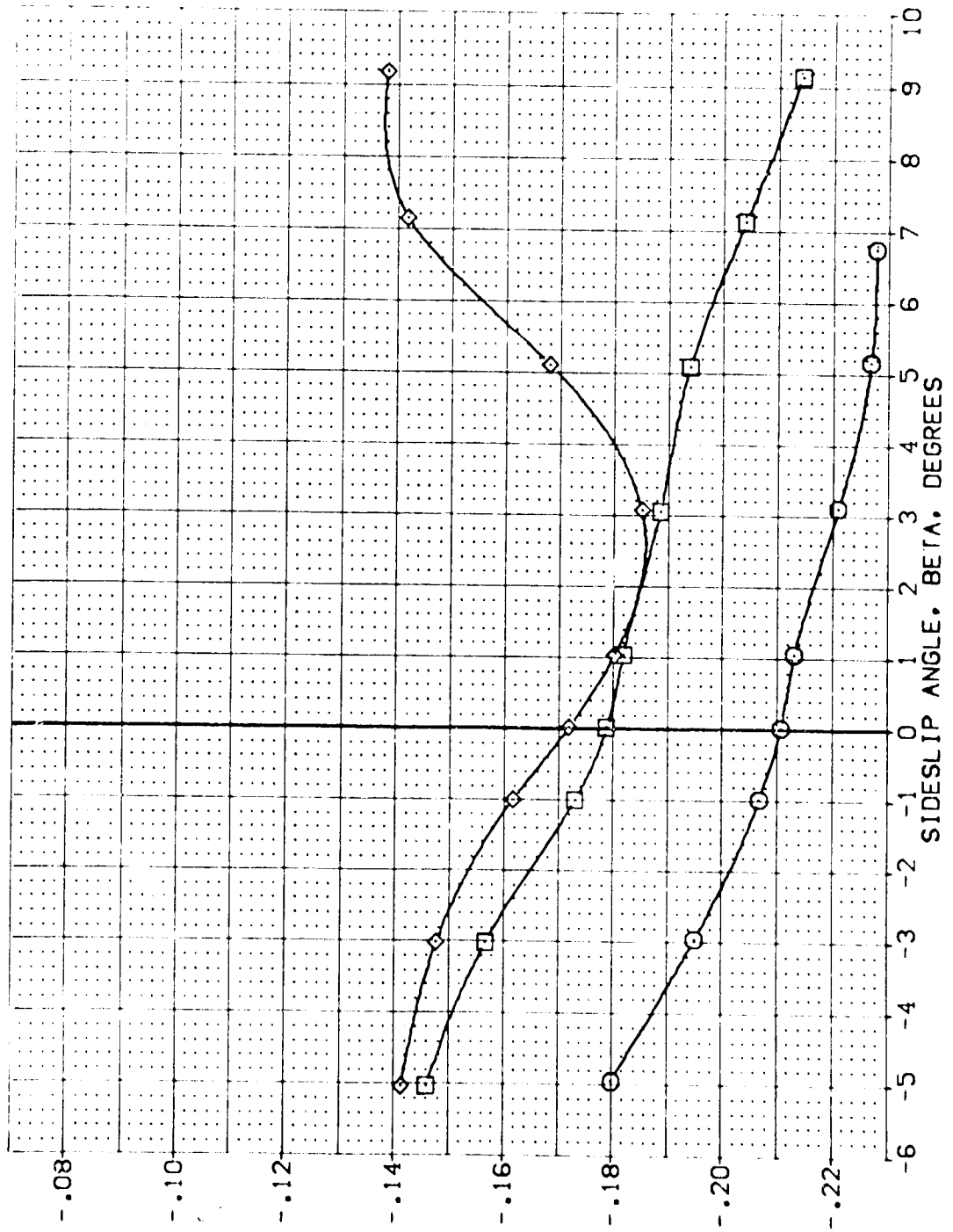


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = 1 20

DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	REFERENCE INFORMATION
(YEJ051)	ARC 11-747 DAS3A B C M F VI V	SREF 2.4210 50.11
(YEJ052)	ARC 11-747 DAS3A B C M F VI V	LREF 14.2440 11.1
(YEJ053)	ARC 11-747 DAS3A B C M F VI V	BREF 20.1300 11.1
		YMRP 32.3000 11.1
		ZMRP 11.2000 11.1
		SCALE 10.500 50.11

ALPHA RUDDER BDFLAP SPODBK

ALPHA	RUDDER	BDFLAP	SPODBK
.000	-25.000	-11.700	55.000
10.000	-25.000	-11.700	55.000
20.000	-25.000	-11.700	55.000



FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(A)MACH = .60

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPODBRK	REFERENCE INFORMATION
(VEJ051)	ARC 11-7 CAS3A B C M E V	0.000	-25.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(VEJ052)	ARC 11-7A CAS3A B C M E V	10.000	-25.000	-11.700	55.000	LRUF 14.2440 IN.
(VEJ053)	ARC 11-747 CAS3A B C M E V	20.000	-25.000	-11.700	55.000	BRUF 28.1004 IN.
						XRUF 32.3010 IN.
						YRUF 11.2000 IN.
						ZRUF 11.2000 IN.
						SCALE .0330

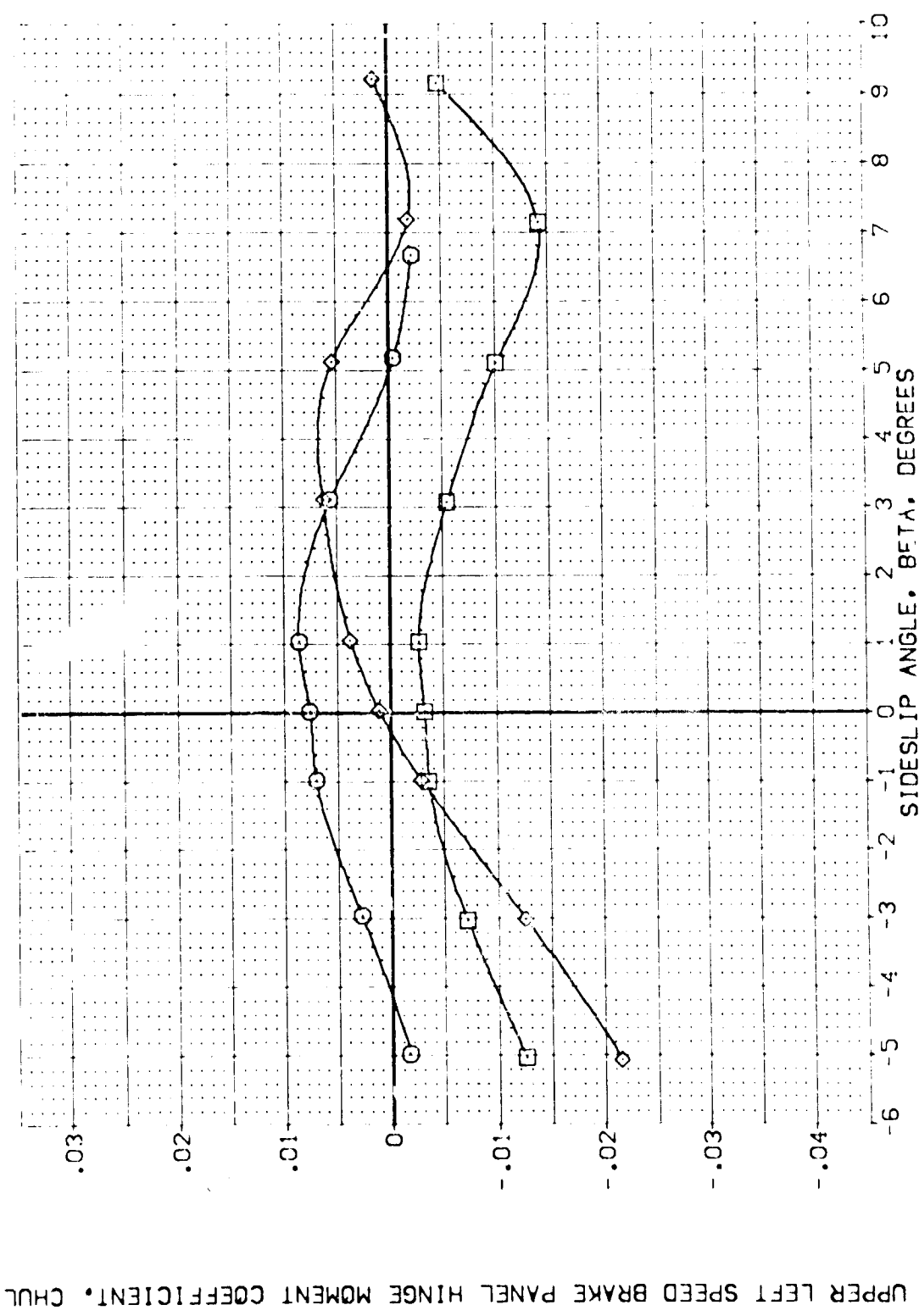


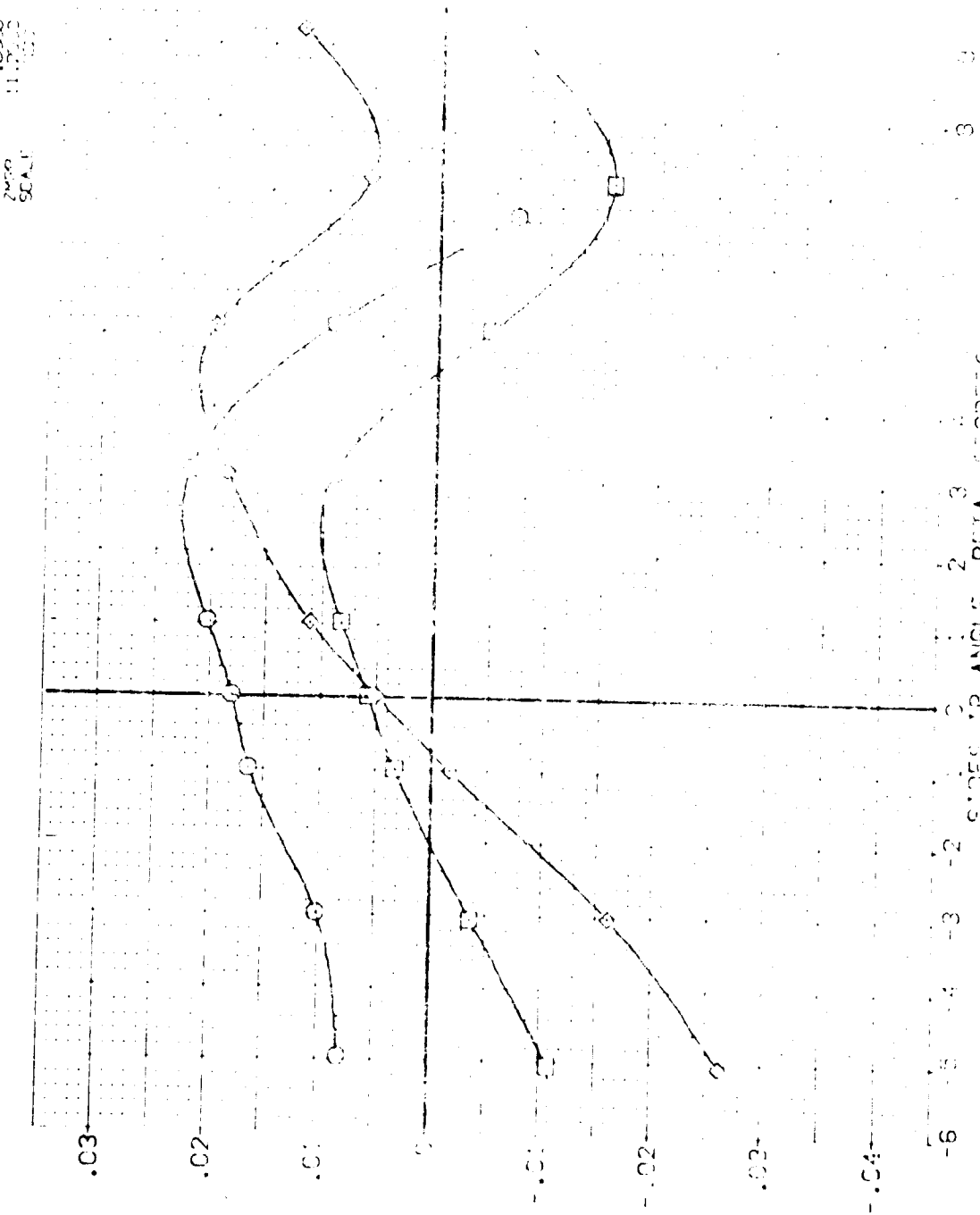
FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(B)MACH = .80

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ABC 11-747 BA53A B C H F VI V  
 ABC 11-747 BA53A B C H F VI V  
 ABC 11-747 BA53A B C H F VI V

ALPHA RUDDER BOFLAP SPEEDS  
 .000 -25.000 -11.700 55.000  
 10.000 -25.000 -11.700 55.000  
 20.000 -25.000 -11.700 55.000

REFERENCE INFORMATION  
 SCALE 2.4210 50.0  
 LIFT 14.2440 50.0  
 DRAG 20.1104 50.0  
 YAW 30.3210 50.0  
 ROLL 11.7000 50.0  
 SCALE 50.0



UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL

FIG. 51 RUDDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 50 PERCENT  
 (COMAC) = .90  
 PRICE 1318



DATA SET SYMBOL	CONF. ID	DESCRIPTION	ALPHA	RUDDER	EOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
1010001	101	1010001	0.000	-25.000	-11.700	55.000	2.4210
1010002	102	1010002	10.000	-25.000	-11.700	55.000	14.2440
1010003	103	1010003	20.000	-25.000	-11.700	55.000	28.1500
							32.3000
							11.2500
							11.2500
							11.2500

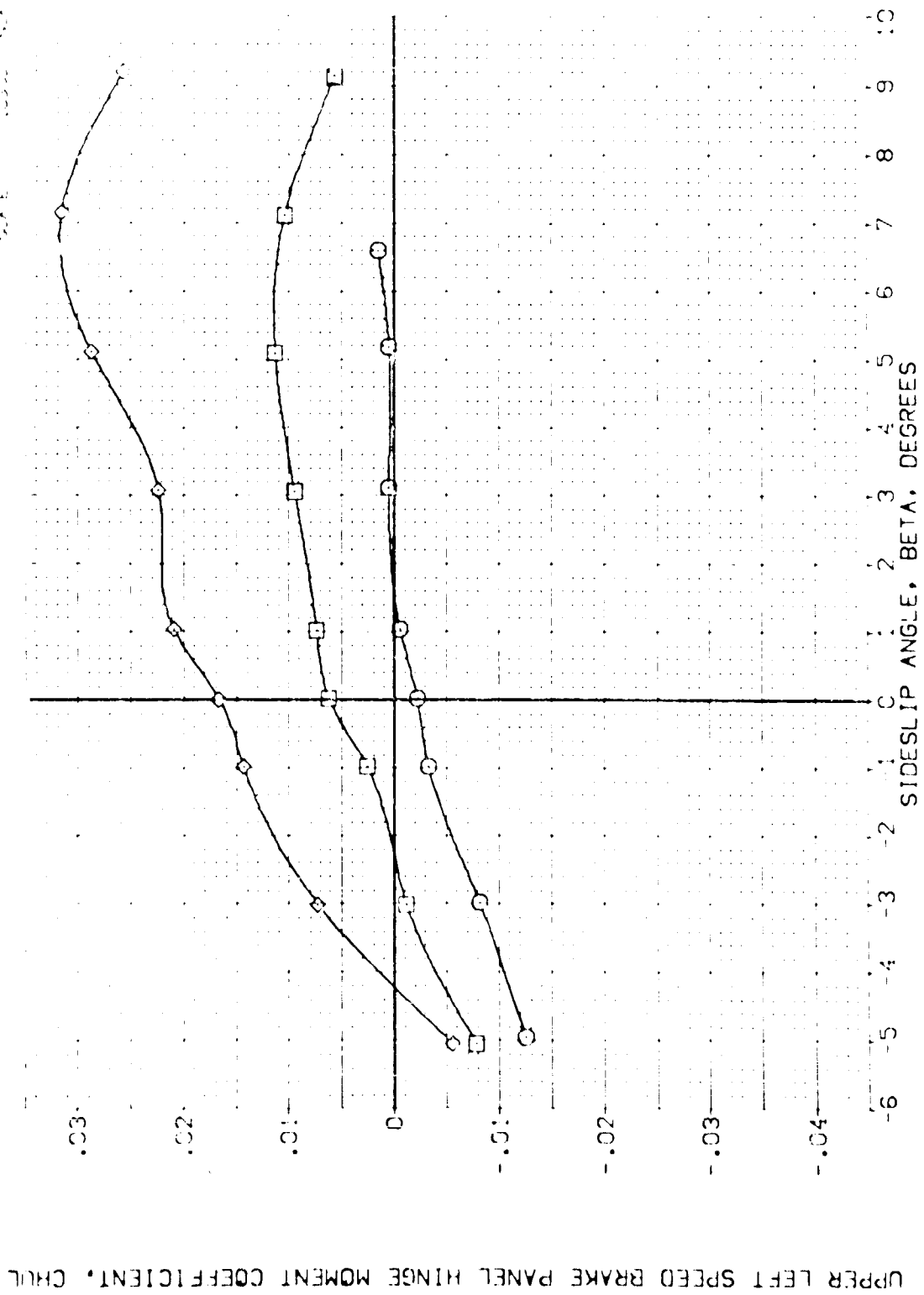


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 $(C_m)_{MAC} = 1.05$   
 PAGE 1307

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE
ARC 11-747 BA53A B C M F V1	Y	0.000	-25.000	-11.700	55.000	2.420
ARC 11-747 BA53A B C M F V1	Y	10.000	-25.000	-11.700	55.000	14.240
ARC 11-747 BA53A B C M F V1	Y	20.000	-25.000	-11.700	55.000	23.120
ARC 11-747 BA53A B C M F V1	Y	30.000	-25.000	-11.700	55.000	32.000
ARC 11-747 BA53A B C M F V1	Y	40.000	-25.000	-11.700	55.000	40.880
ARC 11-747 BA53A B C M F V1	Y	50.000	-25.000	-11.700	55.000	49.760
ARC 11-747 BA53A B C M F V1	Y	60.000	-25.000	-11.700	55.000	58.640
ARC 11-747 BA53A B C M F V1	Y	70.000	-25.000	-11.700	55.000	67.520
ARC 11-747 BA53A B C M F V1	Y	80.000	-25.000	-11.700	55.000	76.400
ARC 11-747 BA53A B C M F V1	Y	90.000	-25.000	-11.700	55.000	85.280
ARC 11-747 BA53A B C M F V1	Y	100.000	-25.000	-11.700	55.000	94.160

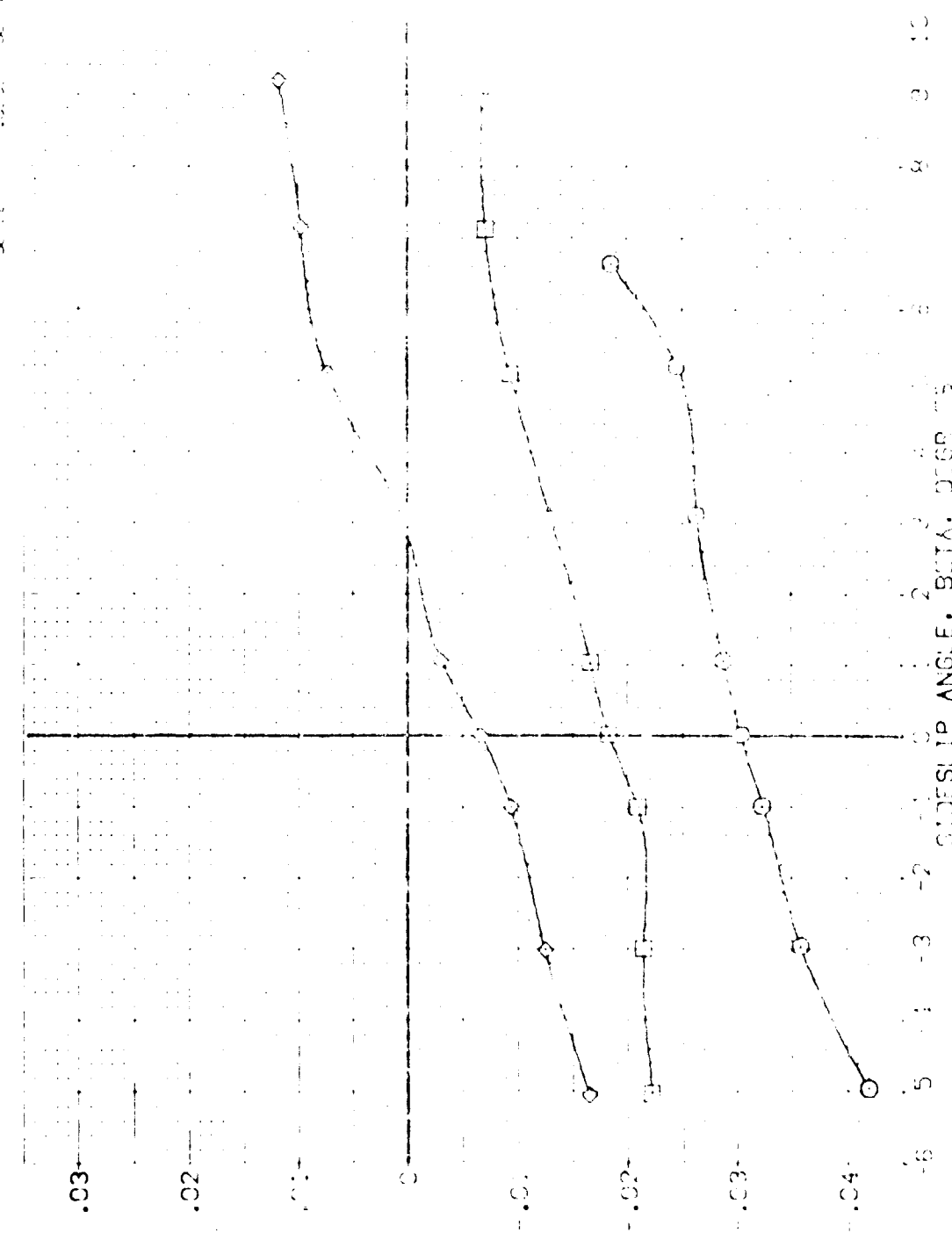


FIG. 51 RUDDER PANEL HINGE MOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DIPS  
 (5)MACH 1.20  
 PAGE 1308

UPPER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUL







DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION
[Y4051]	ARC 11-747	BAS3A B C H F V
[Y4052]	ARC 11-747	BAS3A B C H F V
[Y4053]	ARC 11-747	BAS3A B C H F V

ALPHA RUDDER BDLAP SPEEDBRAK

ALPHA	RUDDER	BDLAP	SPEEDBRAK
.000	-25.000	-11.700	55.000
10.000	-25.000	-11.700	55.000
20.000	25.000	-11.700	55.000

REFERENCE INFORMATION

REFERENCE INFORMATION
SREF
LOC
SRF
YREF
ZREF
SCALE

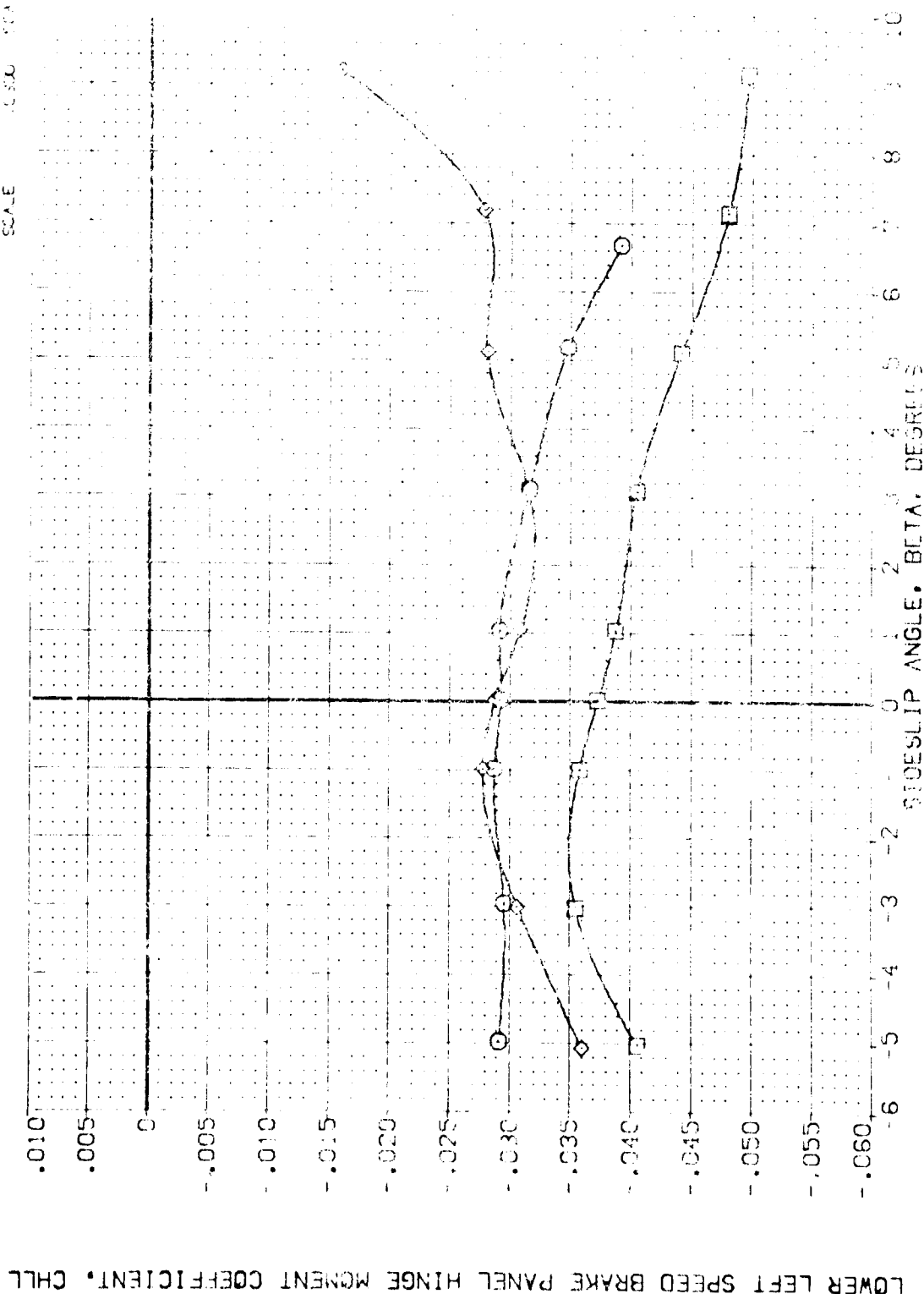


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(B)MACH = .80





DATA SET SYMBOL CONFIGURATION DESCRIPTION REFERENCE INFORMATION

SYMBOL	CONFIGURATION	DESCRIPTION	REFERENCE INFORMATION
ARC 11747	ARC 11747	ARC 11747	2.4213 55.17
ARC 11748	ARC 11748	ARC 11748	14.2440 55.17
ARC 11749	ARC 11749	ARC 11749	28.1001 55.17
ARC 11750	ARC 11750	ARC 11750	32.3010 55.17
ARC 11751	ARC 11751	ARC 11751	11.2000 55.17
ARC 11752	ARC 11752	ARC 11752	10.0000 55.17

LOWER LEFT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLL

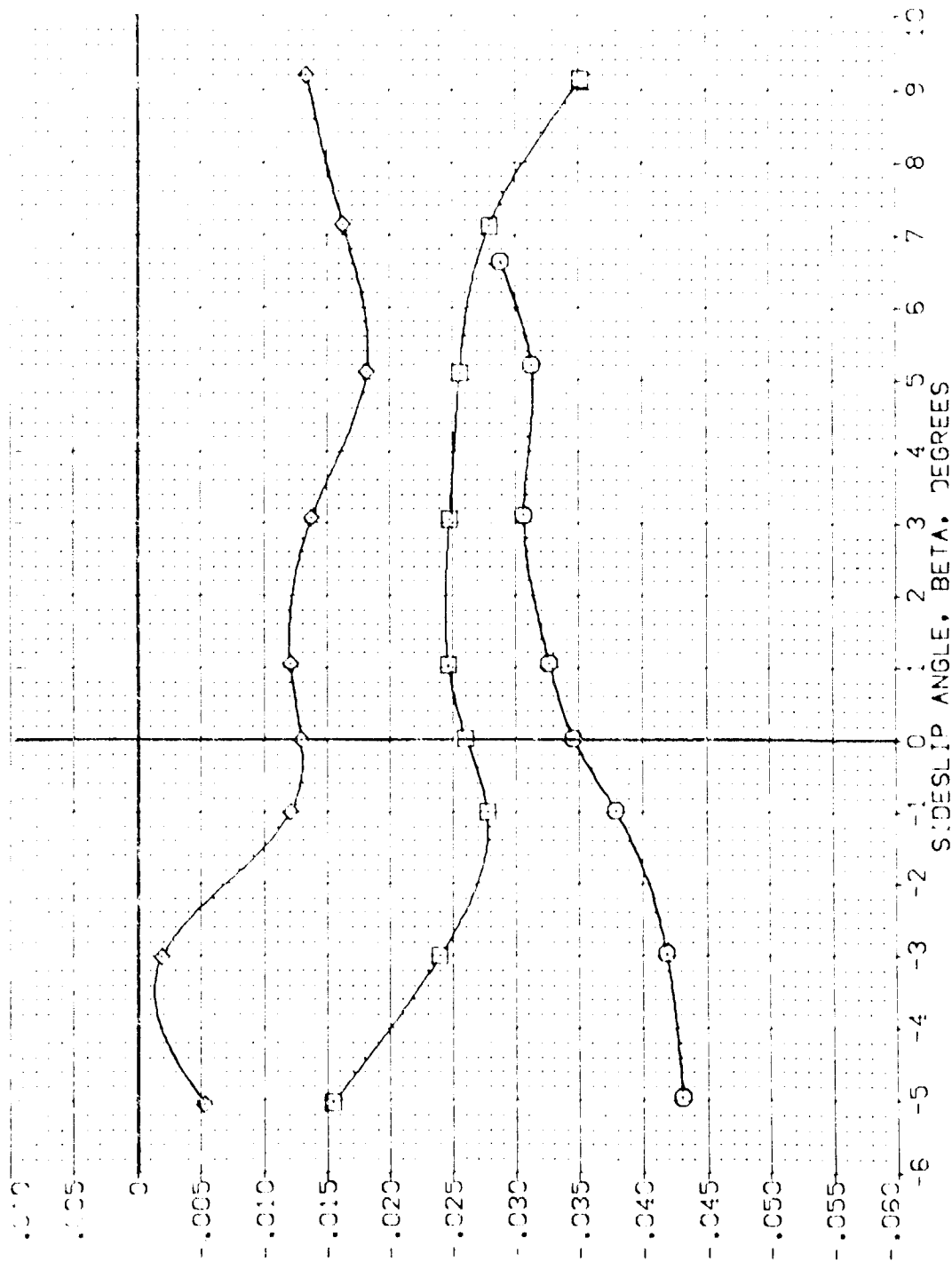


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(C)MACH = 1.20 PAGE 13:3

DATA SET SYMBOL CONFIGURATION DESCRIPTION

ARC 11-747 BA53A B C M F V1 V NM. RVL  
 ARC 11-747 BA53A B C M F V1 V NM. RVL  
 ARC 11-747 BA53A B C M F V1 V NM. RVL

ALPHA RUDDER SIDLAP SPEED  
 .000 -25.000 -11.700 55.000  
 10.000 -25.000 -11.700 55.000  
 20.000 -25.000 -11.700 55.000

REFERENCE INFORMATION  
 SPEED 55.000  
 RREF 55.000  
 SREF 55.000  
 SCALE 1.000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

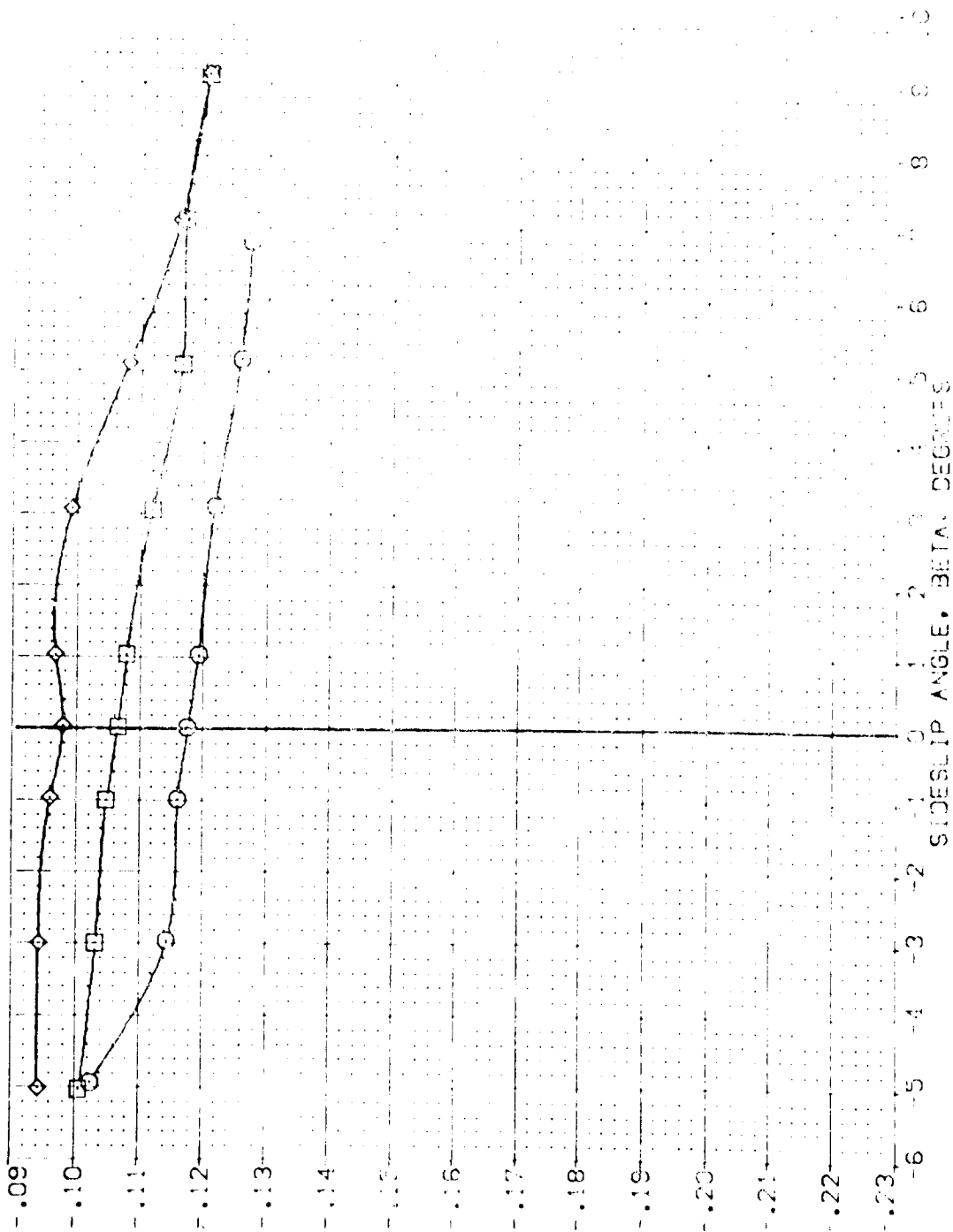


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, BETA, DEGREES  
 (A)MACH = .60



UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	PREFERENCE IN 3 MIN
YFJ051)	APC 11-747 D-53A B C M F V	0.000	-25.000	-11.700	55.000	2.42
YFJ052)	APC 11-747 D-53A B C M F V	10.000	-25.000	-11.700	55.000	14.24
YFJ053)	APC 11-747 D-53A B C M F V	20.000	-25.000	-11.700	55.000	20.00
						32.00
						40.00
						50.00
						60.00
						70.00
						80.00
						90.00

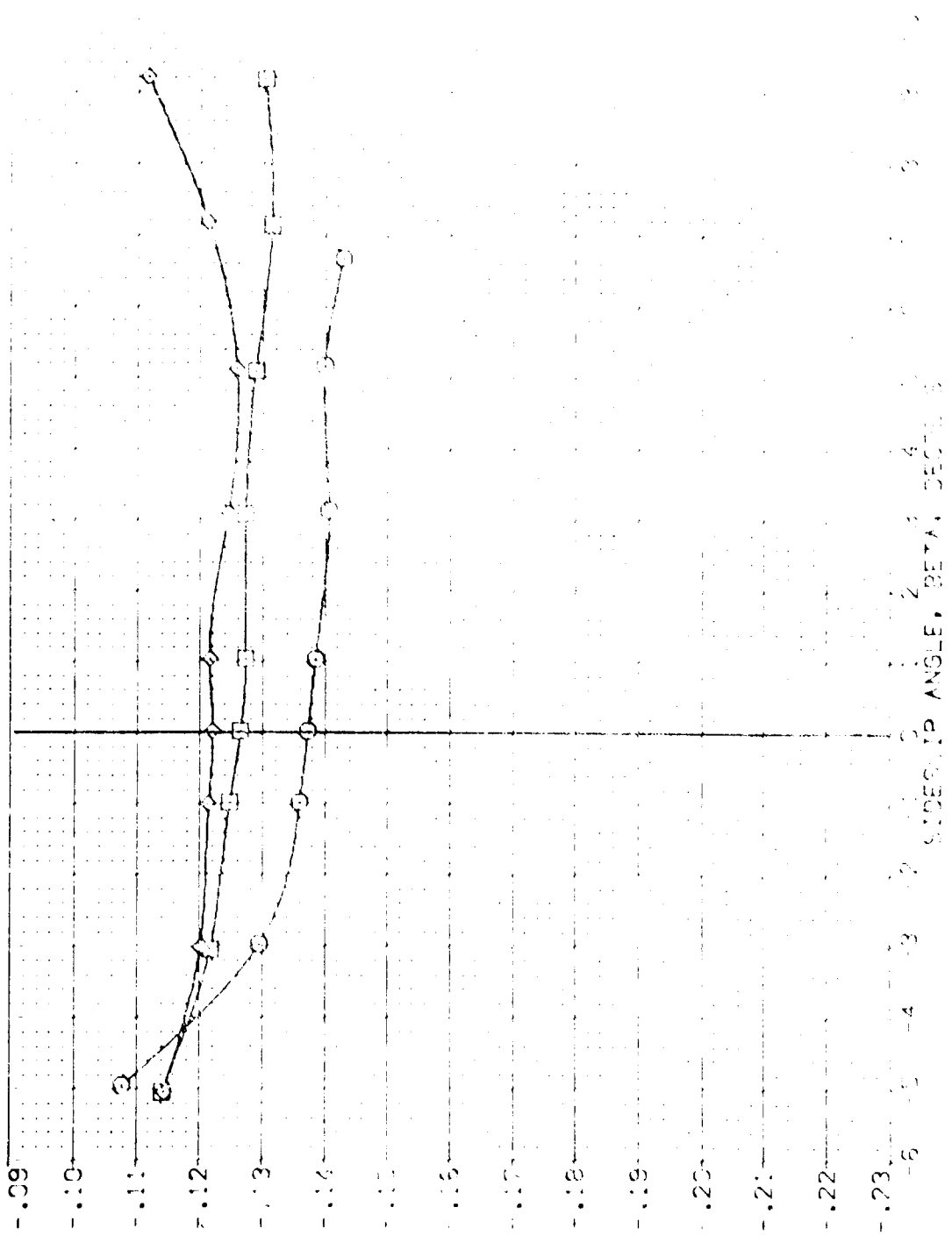


FIG. 51: RUDDER PANEL HINGE MOVEMENT VERSUS SIDESLIP ANGLE, BETA, DEGREES  
 COMMAC = .90  
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DATA SET SYMBOL CONFIGURATION DESCRIPTION

Symbol	Configuration	Description	Alpha	Rudder	Boatlap	Speedbrake	Reference Information
(V1051)	ARC 11-747 GA53A B C M F V	V	0.000	-25.000	-11.700	55.000	SPKE 2.4210 SQ.FT.
(V1052)	ARC 11-747 GA53A B C M F V	V	10.000	-25.000	-11.700	55.000	LBEP 14.2440
(V1053)	ARC 11-747 GA53A B C M F V	V	20.000	-25.000	-11.700	55.000	BPKE 29.1000
							YREF 32.3010
							ZREF 0.0000
							SCALE 11.2750
							SCALE 10.0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

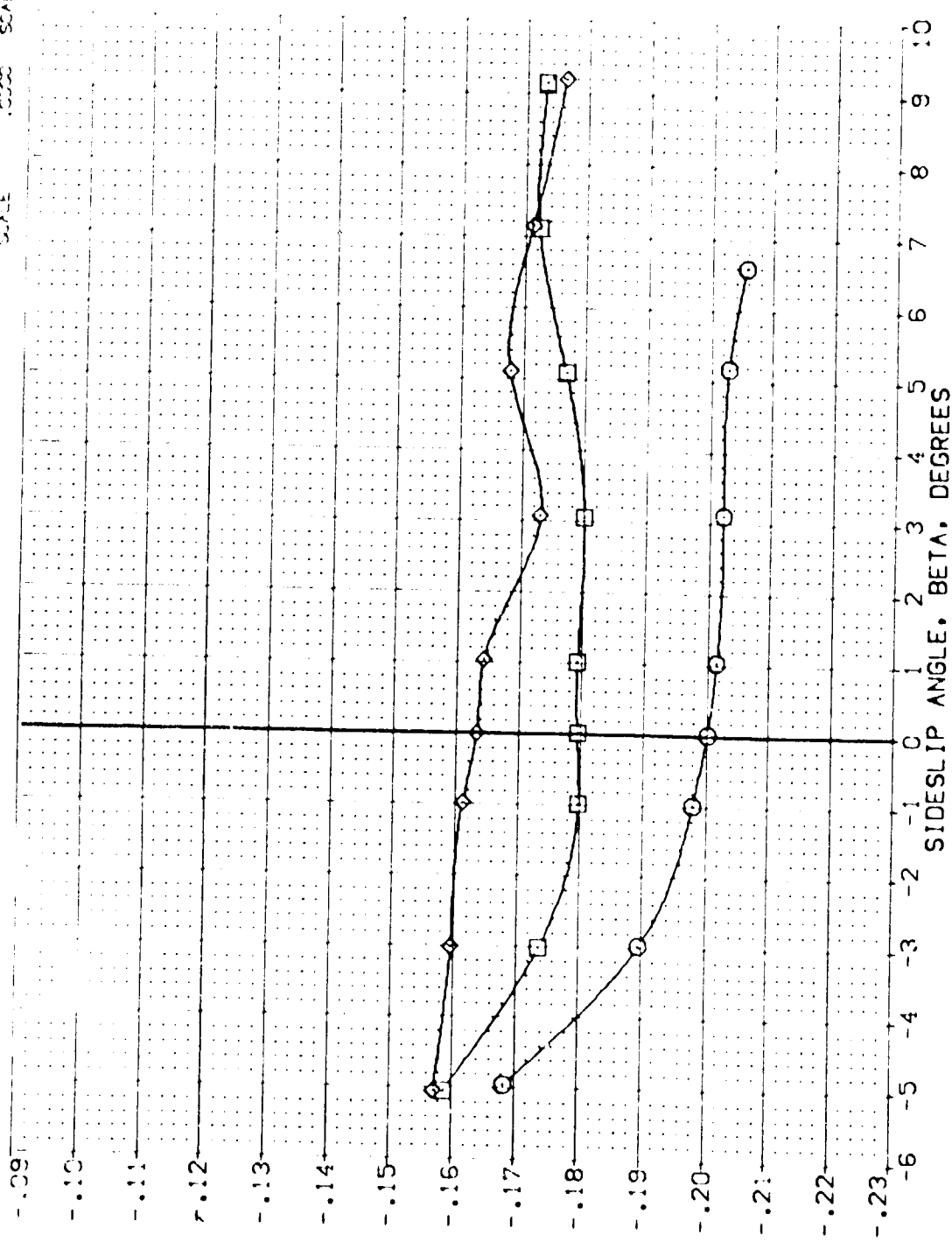


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE. SPEEDBRAKE = 55 DEGREES  
(0)MACH = 1.05

DATA SET SYMBOL CONFIGURATION DESCRIPTION

DATA SET SYMBOL	CONFIGURATION	DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE
(Y4051)	ARC 11-747 BA53A B C M F V	NOM: RVUL	0.00	-25.000	-11.700	55.070	2.4210
(Y4052)	ARC 11-747 BA53A B C M F V	NOM: RVUL	10.000	-25.000	-11.700	55.070	14.2440
(Y4053)	ARC 11-747 BA53A B C M F V	NOM: RVUL	20.000	-25.000	-11.700	55.070	23.0010

SPRKE 2.4210  
SPKE 14.2440  
SPKE 23.0010  
APPR 32.0000  
WFO 30.000  
SCALE 1.0000

UPPER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHUR

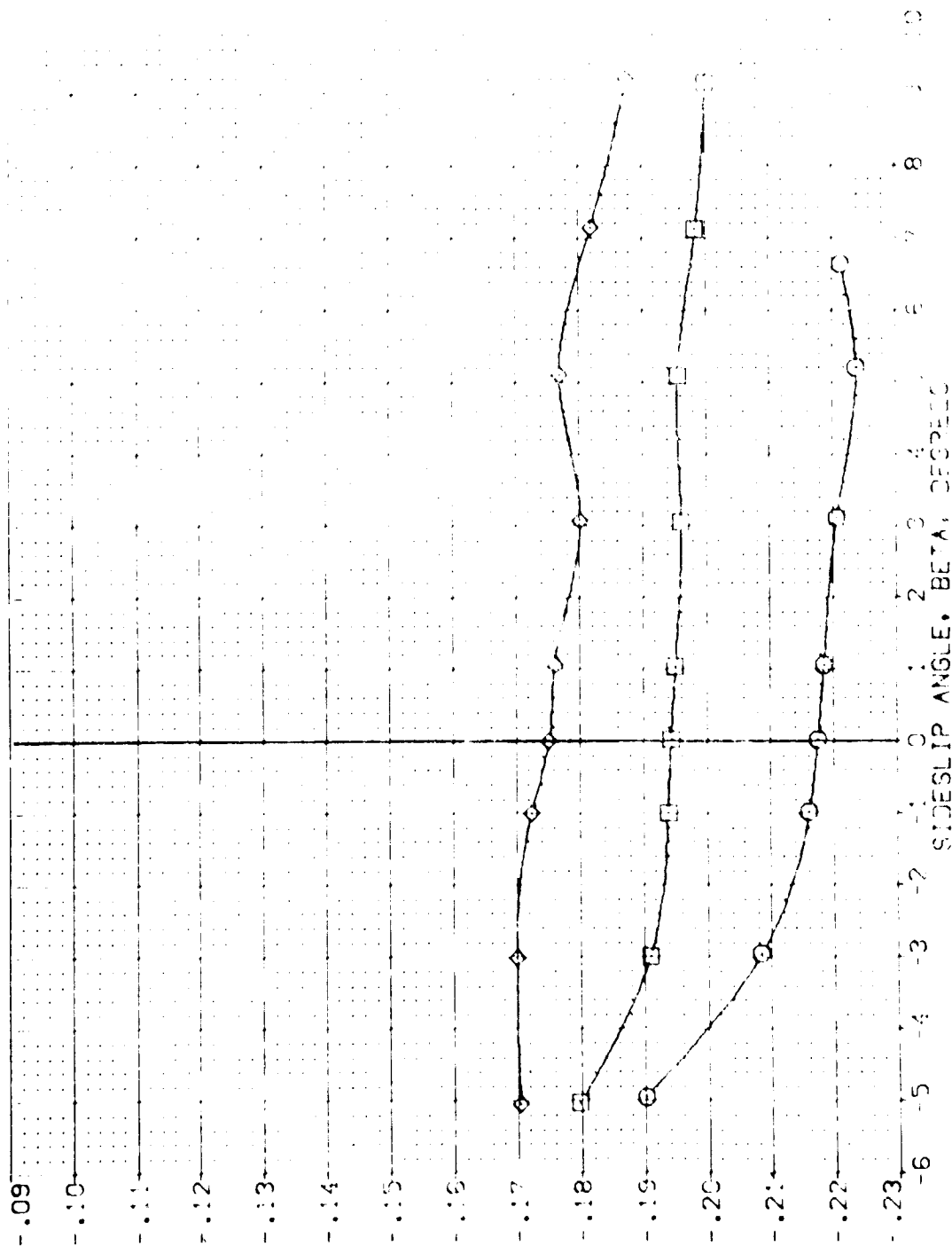


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (EDMAC) = 1.20

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRAKE	REFERENCE INFORMATION
(YE4051)	ARC 1-747 BA B C M F VI V	0.000	-25.000	-11.700	55.000	SREF 2.4210 SQ.FT.
(YE4052)	ARC 1-747 BA B C M F VI V	10.000	-25.000	-11.700	55.000	LREF 14.2440 IN.
(YE4053)	ARC 1-747 BA B C M F VI V	20.000	-25.000	-11.700	55.000	SREF 28.1004 IN.
						XREF 32.2010 IN.
						YREF 0.0000 IN.
						ZREF 11.2700 IN.
						SCALE 1.0000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

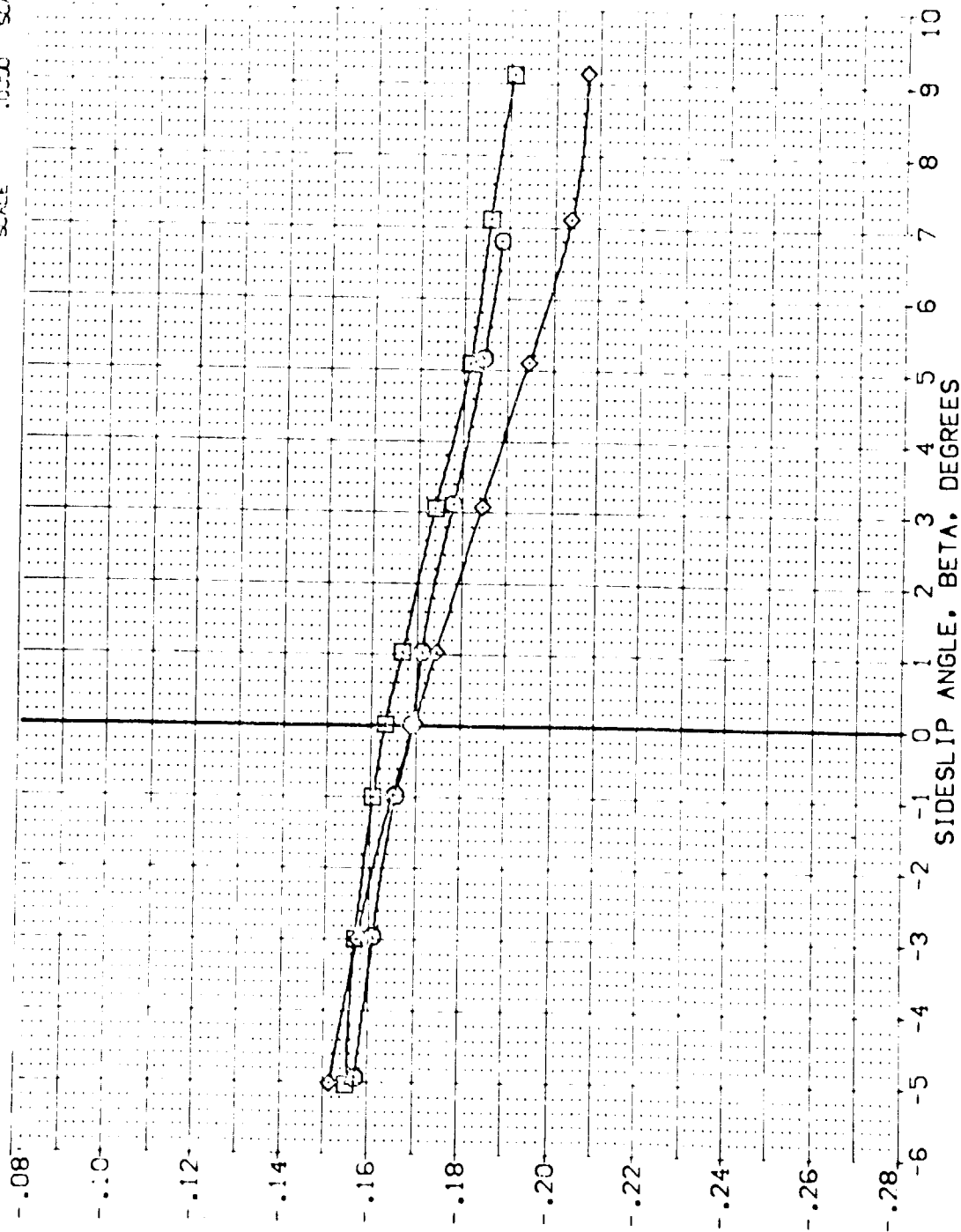


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES

(A)MACH = .60

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CHLR

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEED	REFERENCE INFORMATION
(YE#051)	ARC 11-747 OAS3A B C M F V	.000	-25.000	-11.700	55.000	2.4013
(YE#052)	ARC 11-747 OAS3A B C M F V	10.000	-25.000	-11.700	55.000	1.4013
(YE#053)	ARC 11-747 OAS3A B C M F V	20.000	-25.000	-11.700	55.000	1.4013

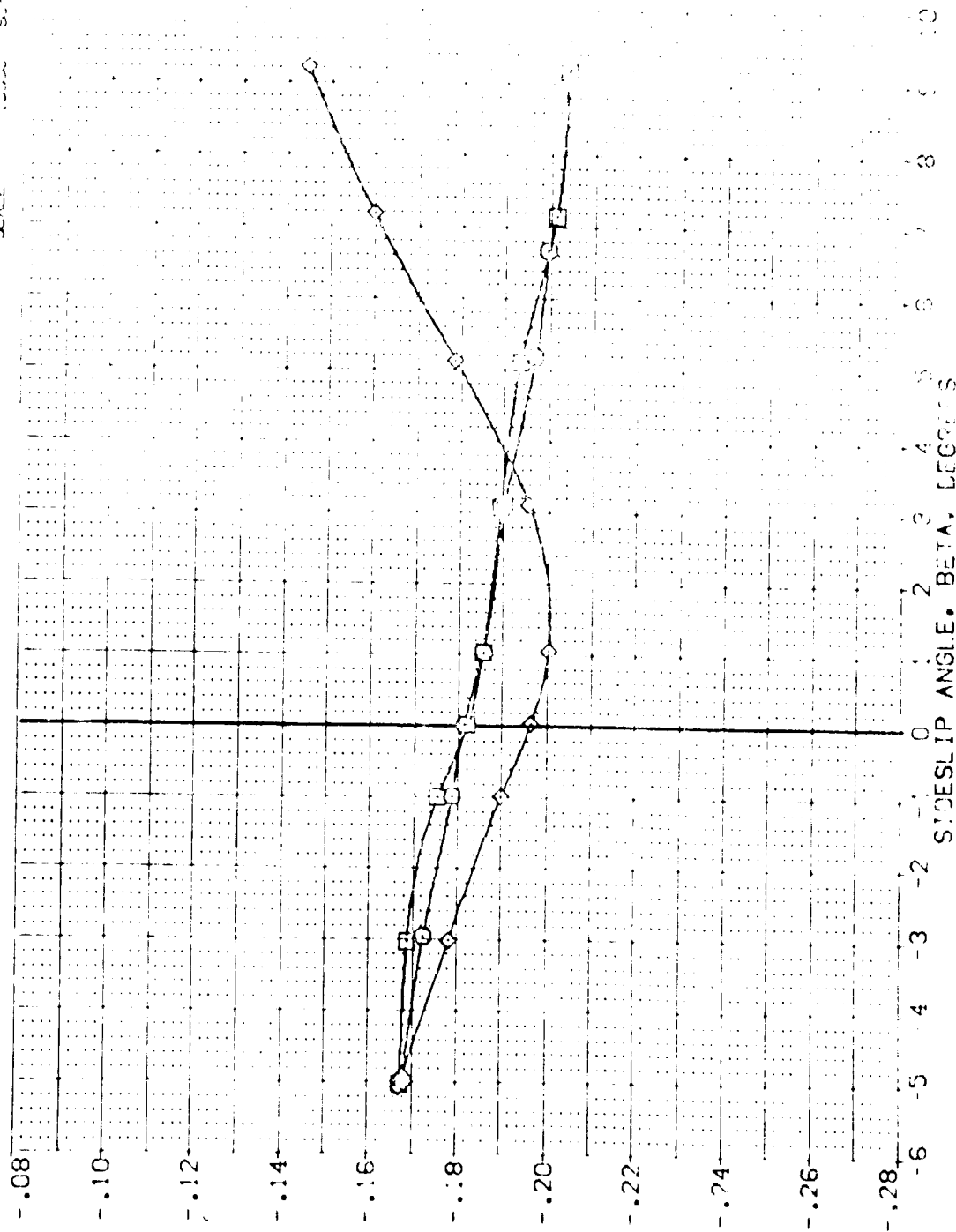


FIG. 51 RUDDER PANEL HINGEMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(B)MACH = .80

DATA SET SYMBOL    CONFIGURATION DESCRIPTION    ALPHA    RUDDER    SPODBRK    REFERENCE INFORMATION

DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	SPODBRK	REFERENCE INFORMATION
Y4000	ARC 11-247 BASD B C M F V	0.000	-25.000	55.000	2.4210 SQ.FT.
Y4000	ARC 11-247 BASD B C M F V	10.000	-25.000	55.000	14.2442
Y4000	ARC 11-247 BASD B C M F V	20.000	-25.000	55.000	28.1054
Y4000	ARC 11-247 BASD B C M F V	30.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	40.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	50.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	60.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	70.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	80.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	90.000	-25.000	55.000	32.3710
Y4000	ARC 11-247 BASD B C M F V	100.000	-25.000	55.000	32.3710

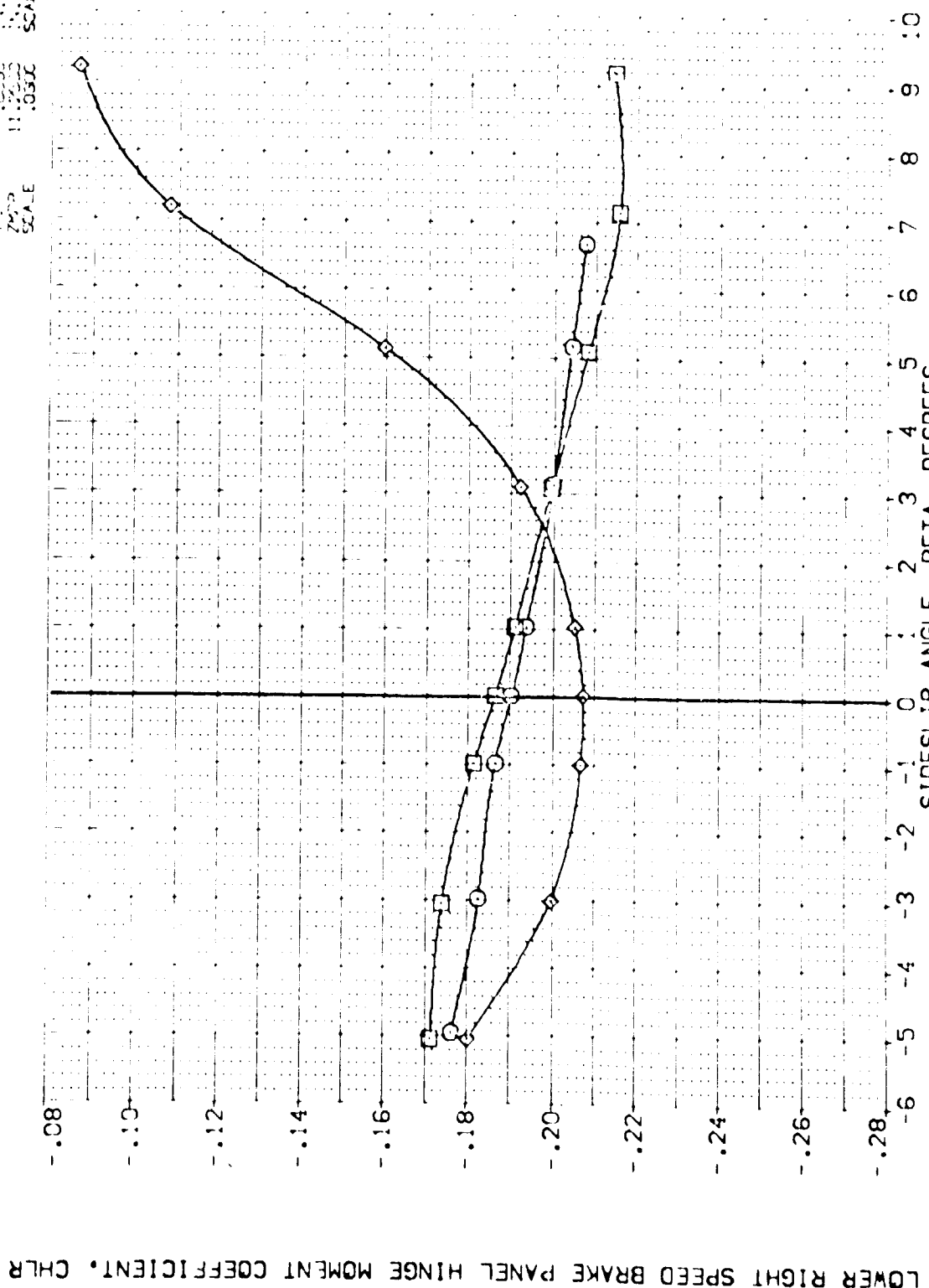


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
 (C)<sup>MACH</sup> = .90      PAGE 132:



DATA SET SYMBOL	CONFIGURATION DESCRIPTION	ALPHA	RUDDER	BOFLAP	SPEEDBRK	REFERENCE INFORMATION
[V1.051]	ABC 11-74 CAS3A B C H F V	0.000	-25.000	-11.700	55.000	SREF 2.4210 SQ.FT.
[V1.052]	ABC 11-74 CAS3A B C H F V	10.000	-25.000	-11.700	55.000	LREF 14.2440 IN.
[V1.053]	ABC 11-74 CAS3A B C H F V	20.000	-25.000	-11.700	55.000	PREF 20.1004 IN.
						XREF 32.2010 IN.
						YREF 2.0000 IN.
						ZREF 11.2000 IN.
						SCALE 10000

LOWER RIGHT SPEED BRAKE PANEL HINGE MOMENT COEFFICIENT, CLRL

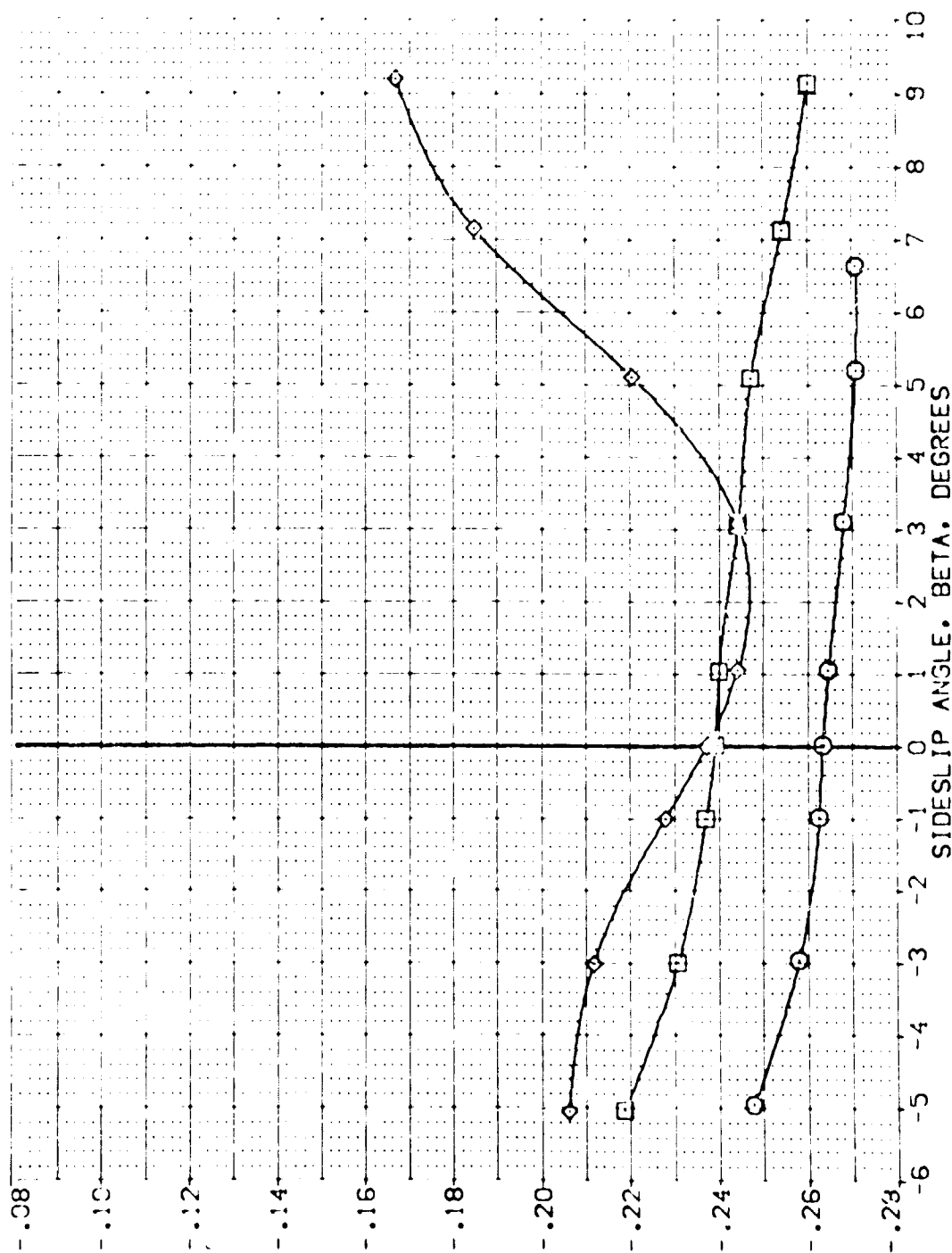


FIG. 51 RUDDER PANEL HINGEMOMENT VERSUS SIDESLIP ANGLE, SPEEDBRAKE = 55 DEGREES  
(E)MACH = 1.20

APPENDIX  
TABULATED SOURCE DATA

Tabulations of plotted data are available on request from  
Data Management Services.



DATE 06 JUL 74

## TABULATED SOURCE DATA - OM33A

PAGE 1

(REJ002) (03 APR 74)

ARC 11-747 OM33A B C H W V NM, RN/L

## REFERENCE DATA

SREF = 2.4210 S4.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 AILERON = .0000 BDLAP = -11.700  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = -10.0000 ELEV-R = -10.000

RUN NO. 114/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.596	-1.708	-2.9460	.07490	.07120	-.29550	.14130	476.70000	.03990	.03130	.04355	-3.93594
.599	.310	-2.2440	.07000	.07130	-.24370	.13930	476.70000	.04165	.02965	.04033	-3.48782
.593	1.361	-1.9720	.06600	.07070	-.19560	.13930	476.70000	.04073	.02997	.03607	-2.98669
.599	1.863	-1.7510	.06410	.06970	-.17290	.14090	476.70000	.03979	.02991	.03415	-2.73374
.600	3.833	-.06610	.05970	.06530	-.08190	.14300	476.70000	.03596	.02934	.03041	-1.44242
.599	5.845	.01560	.05740	.05650	.01140	.14350	476.70000	.02762	.02888	.02864	.08739
.600	7.893	.10260	.05980	.04520	.10980	.14430	476.70000	.01707	.02813	.03198	1.71350
.598	9.904	.20640	.06760	.03110	.21490	.14370	476.70000	.00294	.02816	.03986	3.05254
.598	12.960	.36580	.0990	.01140	.37800	.14450	476.70000	-.01842	.02982	.06682	3.81518
.598	15.010	.52440	.16340	.01240	.54920	.13430	476.70000	-.01966	.03206	.13257	3.20996
.590	22.080	.80940	.34120	.01200	.71650	.12930	476.70000	-.02315	.03535	.21198	2.74368
.597	25.080	.89700	.42840	.00780	.89400	.12660	476.70000	-.02675	.03875	.30536	2.37163
.598	28.980	.84370	.48620	.01650	.97360	.14310	476.70000	-.03739	.04519	.58748	2.09376
GRADIENT		.04565	-.00332	-.00133	.04678	.20180	476.70000	-.04260	.05910	.43445	1.72548
						.00051	.00000	-.00099	-.00034	-.00296	.54877

RUN NO. 113/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.800	-1.729	-2.9140	.08440	.08070	-.29150	.15180	643.20000	.05089	.02981	.05459	-3.44137
.801	.427	-2.2250	.07920	.08090	-.23190	.14960	643.20000	.04932	.03158	.04759	-2.93571
.800	1.437	-1.8270	.07560	.08020	-.18080	.14790	643.20000	.04980	.03040	.04525	-2.41608
.800	1.949	-1.5430	.07380	.07940	-.15170	.14700	643.20000	.04918	.02982	.04399	-2.09391
.801	3.910	-.05270	.07090	.07430	-.04770	.14540	643.20000	.04487	.02943	.04151	-.74294
.797	5.919	.05110	.07070	.06510	.05810	.14190	643.20000	.03526	.02984	.04107	.72199
.800	7.976	.16650	.08180	.05790	.17620	.13440	643.20000	.02827	.02963	.05244	2.03525
.802	9.951	.27690	.10560	.05610	.29100	.12700	643.20000	.02694	.02916	.07632	2.62385
.799	13.000	.40890	.15260	.05660	.43270	.13010	643.20000	.02561	.03099	.12229	2.68142
.799	16.070	.52280	.21720	.06400	.56250	.13010	643.20000	.02996	.03404	.18449	2.40895
.797	19.150	.64840	.29370	.06480	.70880	.14030	643.20000	.02710	.03770	.25812	2.20719
.799	22.240	.74950	.37330	.06180	.83500	.16030	643.20000	.01818	.04362	.33287	2.00307
.800	25.330	.76930	.43440	.06350	.88110	.20940	643.20000	.00710	.05640	.38338	1.77395
.795	29.300	.79740	.52370	.06650	.95170	.22620	643.20000	-.00163	.06813	.46432	1.52353
GRADIENT		.05129	-.00290	-.00143	.05260	-.00138	-.00000	-.00121	-.00022	-.00267	.58916



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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AFC 11-747 QAS3A B C M F W Y NM, RN/L

(REJ002) (03 APR 74)

REFERENCE DATA

SREF = 2.421 51.0 FT. 1000 ELEVON = -10.000  
 SREF = 14.241 IN. 1000 BDFLAP = -11.700  
 SREF = 20.114 IN. 1000 RUDSEP = 0.000  
 SCALE = 0.0000 SCALE ELEV-L = -10.000

PARAMETRIC DATA

BETA = 0.000 ELEVON = -10.000  
 ALLRON = 0.000 BDFLAP = -11.700  
 SPDGRK = 25.000 RUDSEP = 0.000  
 ELEV-L = -10.000 ELEV-H = -10.000

PJM NO. 1037 0 RN/L = 2.96 GRADIENT INTERVAL = -5.000/ 5.00

WACH	ALPHA	CL	CD	CA	CN	CLMFCD	Q	CAF	CAB	COF	L/C
1.201	-0.672	-0.16330	.15995	.15800	-0.16570	.11750	564.70000	.10475	.05325	.10669	-1.02440
1.203	.279	-0.16660	.15670	.15730	-0.16580	.10440	564.70000	.10455	.05275	.10483	-0.67970
1.204	1.302	-0.04470	.15520	.15620	-0.04120	.09070	564.70000	.10442	.05175	.10345	-0.26522
1.206	1.729	-0.01570	.15520	.15560	-0.01090	.08500	564.70000	.10333	.05227	.10234	-0.11151
1.198	3.713	.03560	.16000	.15350	.10380	.06550	564.70000	.10171	.05179	.10214	.59762
1.197	5.691	.20330	.17160	.15060	.21930	.04830	564.70000	.09666	.05194	.11922	1.14462
1.195	7.727	.31130	.19730	.14640	.33660	.03480	564.70000	.09327	.05313	.13768	1.64315
1.201	9.701	.42070	.21540	.14150	.45100	.02110	564.70000	.08624	.05346	.16278	1.93248
1.201	12.720	.57330	.26930	.13640	.61850	.00930	564.70000	.07562	.05578	.21412	2.11230
1.195	15.790	.72570	.34150	.13310	.79180	-.00500	564.70000	.07996	.05514	.26681	2.11245
1.197	18.600	.85920	.42960	.12920	.95170	-.01660	564.70000	.06643	.05277	.36358	2.00297
1.195	21.640	.95750	.51880	.12540	1.08200	-.01020	564.70000	.05762	.06778	.45601	1.74454
1.195	24.670	1.03600	.61140	.11990	1.19700	-.00100	564.70000	.04773	.07127	.54671	1.56946
1.194	28.930	1.09200	.72900	.10970	1.30900	.03200	564.70000	.03442	.07428	.66369	1.43620
	GRADIENT	.05921	.005209	-.02105	.06194	-.01185	.00000	-.00072	-.00032	.00043	.37114

ARC 11-747 0453A B C H F M V NOM. RN/L

(REJ003) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEV-N = 15.000  
 AIRLON = .0000 BDFAR = -11.700  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 164/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.599	-.521	.16050	.08540	.06800	.15970	-.08260	641.40000	.04441	.04239	.04296	1.86039
.598	-.561	.18320	.08670	.06690	.18310	-.08350	641.40000	.04544	.04146	.04524	2.11287
.595	.974	.23340	.08980	.06580	.23490	-.08490	641.40000	.04370	.04210	.04768	2.59974
.595	1.482	.25750	.09090	.08420	.25970	-.08530	641.40000	.04249	.04171	.04919	2.83243
.596	3.426	.35290	.10050	.07930	.35830	-.08730	641.40000	.03910	.04020	.06344	3.50920
.597	5.437	.45000	.11430	.07110	.45880	-.08950	641.40000	.02931	.04119	.07325	3.91865
.599	7.495	.55890	.13340	.05930	.57150	-.09490	641.40000	.01916	.04014	.09354	4.19142
.597	9.471	.67660	.15950	.04590	.69360	-.10480	641.40000	.00555	.04025	.11970	4.24444
.598	12.490	.83890	.22240	.03570	.86710	-.11050	641.40000	-.00601	.04171	.18166	3.77215
.598	15.600	.97950	.30740	.04350	.98760	-.10130	641.40000	-.00151	.04501	.26413	3.05563
.597	18.640	1.08820	.41870	.04880	1.16590	-.11460	641.40000	-.00469	.05049	.37076	2.59995
.596	21.680	1.19200	.52420	.04680	1.30100	-.09900	641.40000	-.00924	.05604	.47203	2.27173
.597	24.800	1.13400	.57230	.04370	1.27000	-.09150	641.40000	-.02417	.06767	.51077	1.98213
.598	26.970	1.02000	.62400	.05350	1.19400	-.06510	641.40000	-.02690	.08040	.55349	1.63416
GRADIENT	.04868	.00360	-.00198	.05025	-.00116	-.00000	-.00000	-.00152	-.00046	.00430	.41210

RUN NO. 163/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.800	-.595	.12840	.09180	.09320	.12750	-.07310	641.80000	.05181	.04139	.05048	1.39 20
.804	-.992	.15160	.09300	.09320	.15150	-.07330	641.80000	.05277	.04043	.05252	1.82140
.801	-.920	.20790	.09650	.09310	.20940	-.07780	641.80000	.05165	.04145	.05501	2.15530
.802	1.438	.23550	.09840	.09240	.23730	-.07950	641.80000	.05158	.04042	.05794	2.34479
.796	3.399	.34980	.10960	.08860	.35570	-.08760	641.80000	.04758	.04102	.06859	3.13375
.798	5.388	.46690	.12650	.08210	.47670	-.09820	641.80000	.04068	.04122	.08547	3.69071
.800	7.419	.58080	.15400	.07770	.59590	-.10760	641.80000	.03794	.03976	.11457	3.77217
.799	9.424	.65630	.18750	.07750	.67810	-.10330	641.80000	.03736	.04014	.14769	3.50111
.798	12.480	.75500	.25260	.08350	.79180	-.09430	641.80000	.03736	.04554	.20817	2.36871
.800	15.530	.90020	.34640	.09270	.96010	-.10900	641.80000	.04169	.05101	.29723	2.59849
.796	18.630	1.01100	.43920	.09320	1.09800	-.09670	641.80000	.03551	.05769	.38441	2.30135
.796	21.750	1.05700	.51950	.09090	1.17400	-.05340	641.80000	.02517	.06573	.45841	2.03429
.797	24.930	1.00000	.56680	.09220	1.14600	.03280	641.80000	.00877	.08343	.49100	1.76515
.797	28.980	1.02900	.67740	.09390	1.22800	.05200	641.80000	.00353	.08997	.59841	1.51971
GRADIENT	.05576	.00449	-.00017	.05747	-.000371	-.00000	-.00000	-.00114	-.00003	.00451	.45047

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ003) (03 APR 74)

## REFERENCE DATA

SREF = 2.4010 SQ.FT. WARP = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .00300 SCALE

BETA =  
 AIRLON =  
 SPDRK =  
 ELEV-L =

.000 ELEVON = 15.000  
 .000 BDFLAP = -11.700  
 25.000 RUDDER = .000  
 15.000 ELEV-R = 15.000

RUN NO. 161 / 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00 / 5.00

*CH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.900	-1.616	.11660	.10280	.10410	.11550	-.07210	611.10000	.06324	.04086	.06200	1.13380
.900	-1.079	.14550	.10470	.10490	.14540	-.07620	611.10000	.06364	.04126	.06344	1.39010
.900	.914	.21790	.10520	.10530	.20900	-.08350	611.10000	.06507	.04183	.06840	1.89784
.901	1.439	.23860	.11170	.10560	.24140	-.08720	611.10000	.06501	.04059	.07105	2.13388
.901	2.354	.36270	.12750	.11600	.36960	-.10350	611.10000	.06643	.03957	.08794	2.84652
.900	5.332	.47640	.14900	.10390	.49020	-.11810	611.10000	.06288	.04102	.10816	3.21123
.896	7.371	.58140	.17910	.10300	.59950	-.12320	611.10000	.05984	.04316	.13626	3.24856
.901	9.404	.68280	.21740	.10790	.67900	-.11860	611.10000	.06147	.04643	.17166	3.00019
.894	12.440	.76310	.28240	.11150	.80600	-.11340	611.10000	.06164	.05066	.23284	2.70101
.899	15.500	.89770	.37170	.11830	.96440	-.12420	611.10000	.06215	.05615	.31762	2.41961
.897	18.570	.99370	.46070	.12020	1.04900	-.10850	611.10000	.05676	.06344	.40061	2.15741
.899	21.720	1.02600	.53760	.11990	1.15200	-.06240	611.10000	.04542	.07348	.46945	1.90789
.902	24.900	1.06400	.59710	.11870	1.16200	.02170	611.10000	.03216	.08654	.51841	1.68801
.898	28.690	1.07090	.72090	.11410	1.28500	.03840	611.10000	.02247	.09163	.64049	1.48456
GRADIENT	.06228	.00624	.00624	.00043	.06430	-.00788	.00001	.00081	-.00038	.00660	.43105

RUN NO. 161 / 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.053	-1.636	.09790	.16820	.16930	.09610	-.06560	627.10000	.10423	.06507	.10316	.58241
1.054	-1.106	.12980	.17070	.17090	.12870	-.07110	627.10000	.10646	.06444	.10622	.75559
1.054	.885	.19510	.17210	.16910	.19770	-.08450	627.10000	.10724	.06186	.11028	1.13321
1.053	1.482	.23380	.17540	.16930	.23830	-.09320	627.10000	.10730	.06200	.11342	1.33314
1.050	3.324	.35720	.19110	.16900	.36760	-.11820	627.10000	.10731	.06169	.12845	1.87561
1.054	5.264	.47900	.21260	.16780	.49650	-.14020	627.10000	.10607	.06173	.15117	2.25265
1.048	7.289	.59730	.24250	.16480	.62330	-.15700	627.10000	.10209	.06271	.18035	2.46282
1.050	9.252	.70500	.28000	.16900	.74080	-.16920	627.10000	.09764	.06536	.21547	2.51785
1.047	12.280	.85290	.35180	.16240	.90820	-.17450	627.10000	.09325	.06915	.28428	2.42400
1.048	15.390	.98730	.44490	.16690	1.07000	-.17510	627.10000	.09329	.07361	.37391	2.21934
1.048	18.430	1.10400	.54270	.16590	1.21940	-.17290	627.10000	.08921	.07669	.47002	2.03405
1.048	21.500	1.19600	.64730	.16390	1.35000	-.16460	627.10000	.08290	.08100	.57191	1.84775
1.052	24.620	1.22100	.73620	.16160	1.41700	-.11150	627.10000	.07337	.08723	.65702	1.65862
1.048	28.730	1.19000	.82780	.15360	1.44200	-.03860	627.10000	.05584	.09776	.74211	1.43627
GRADIENT	.06577	.00540	.00540	-.00025	.06886	-.01345	.00000	.00062	-.00088	.00628	.32991

ARC 11-747 0453A B C M F W V NDA, RN/L

(REJ003) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 180/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWO	Q	CAF	CAB	CDF	L/D
1.201	-0.653	.08110	.17200	.17290	.07910	-.05960	569.90000	.11240	.06050	.11149	.47135
1.201	-1.100	.10990	.17270	.17290	.10960	-.06630	569.90000	.11188	.06102	.11163	.63635
1.200	.913	.17140	.17630	.17320	.17420	-.07940	569.90000	.11390	.05330	.11666	.97422
1.200	1.436	.20130	.17850	.17340	.20570	-.08600	569.90000	.11324	.0616	.11836	1.12767
1.203	3.330	.31110	.19490	.17250	.32170	-.10790	569.90000	.11332	.05918	.13182	1.62968
1.200	5.311	.42470	.21000	.17030	.44240	-.12810	569.90000	.11195	.05835	.15242	2.01758
1.197	7.353	.54110	.23870	.16750	.56720	-.14670	569.90000	.11045	.05905	.18012	2.35734
1.198	9.295	.64810	.27270	.16450	.68370	-.16150	569.90000	.11511	.05959	.21415	2.37619
1.196	12.310	.81220	.34460	.16350	.86700	-.17840	569.90000	.10670	.06272	.28331	2.35735
1.195	15.368	.95460	.43340	.16470	1.03500	-.18630	569.90000	.09981	.06489	.37673	2.23027
1.195	18.430	1.06800	.52980	.16500	1.18000	-.18600	569.90000	.09565	.06935	.46320	2.13496
1.196	21.470	1.15500	.62730	.16160	1.30500	-.17610	569.90000	.09118	.07182	.56167	1.83454
1.194	24.530	1.19700	.71790	.15600	1.38700	-.14220	569.90000	.08017	.07583	.64678	1.60770
1.192	27.630	1.24100	.84040	.14390	1.43200	-.10410	569.90000	.06370	.08271	.77014	1.47047
GRADIENT		.05808	.00483	-.00228	.06124	-.01217	.00001	.00031	-.00030	.00524	.29741

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F M V NOM. RN/L

(REJ004) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = 10000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = 5.000 BOFLAP = -11.700  
 SPDPRK = 25.000 RUDDER = .000  
 ELEV-L = 5.000 ELEV-R = -5.000

RUN NO. 119/0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-.653	-.10680	.06550	.06420	-.10750	.05260	476.50000	.03032	.03388	.03155	-1.63189
.599	-.171	-.07230	.06390	.06410	-.07210	.05250	476.50000	.03035	.03375	.03014	-1.13159
.600	1.203	-.02350	.06290	.06340	-.02220	.05220	476.50000	.03033	.03307	.02986	-.37391
.601	1.712	.00070	.06280	.06270	.02250	.05180	476.50000	.02918	.03352	.02924	.00997
.601	3.695	.09420	.06380	.05760	.09810	.05270	476.50000	.02483	.03277	.03110	1.47619
.600	5.760	.19460	.06850	.04860	.20450	.05170	476.50000	.01614	.03246	.03618	2.84197
.598	7.749	.29330	.07730	.03700	.30110	.04950	476.50000	.00422	.03278	.04478	3.79704
.598	9.751	.39980	.09140	.02230	.40950	.04650	476.50000	-.02091	.03221	.05959	4.37744
.598	12.770	.56570	.13500	.00660	.58150	.04200	476.50000	-.02691	.03351	.10229	4.19493
.600	15.830	.70480	.21340	.01300	.73630	.03550	476.50000	-.02347	.03647	.17828	3.30351
.597	18.910	.85270	.30800	.01510	.90640	.02690	476.50000	-.02588	.04098	.26926	2.76784
.598	21.940	.98020	.41000	.01400	1.06200	.02200	476.50000	-.03310	.04710	.36610	2.39113
.599	24.980	1.03500	.49390	.01050	1.14700	.01620	476.50000	-.04152	.05202	.44675	2.09612
.598	28.980	.92780	.53980	.02280	1.07300	.01390	476.50000	-.04432	.06712	.48110	1.71336
GRADIENT		.04649	-.00034	-.00154	.04755	-.00000	.00000	-.00129	-.00025	-.00006	.72130

RUN NO. 118/0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.801	-.666	-.11160	.07010	.06880	-.11250	.06010	638.60000	.03533	.03347	.03663	-1.59329
.802	-.219	-.06780	.06820	.06820	-.06750	.05930	638.60000	.03440	.03380	.03414	-.99733
.803	1.269	-.01580	.06740	.06770	-.01430	.05840	638.60000	.03518	.03352	.03485	-.23447
.800	1.764	.00680	.06740	.06710	.01080	.05820	638.60000	.03406	.03304	.03438	.12951
.799	3.723	.10950	.06930	.06200	.11370	.05660	638.60000	.02868	.03332	.03601	1.58023
.797	5.728	.21590	.07640	.05450	.22240	.05280	638.60000	.02291	.03159	.04499	2.82439
.800	7.784	.32960	.09390	.04840	.33930	.04640	638.60000	.01668	.03172	.06248	3.51000
.800	9.799	.42170	.12250	.04890	.43630	.04420	638.60000	.01568	.03322	.08971	3.44338
.801	12.870	.54440	.17770	.05190	.57030	.04610	638.60000	.01649	.03541	.14310	3.06496
.801	15.880	.67450	.25510	.06180	.71850	.03730	638.60000	.02183	.03897	.21759	2.64407
.800	18.990	.80560	.34030	.05970	.87250	.03940	638.60000	.01584	.04386	.29889	2.36684
.801	22.100	.89780	.42780	.05860	.99280	.03630	638.60000	.00682	.05178	.37983	2.09862
.799	25.130	.89080	.48430	.06030	1.01200	.02430	638.60000	-.00626	.06656	.42410	1.83871
.797	29.190	.91550	.58690	.06580	1.08500	.01450	638.60000	-.01197	.07777	.51871	1.56003
GRADIENT		.05036	-.00010	-.00153	.05151	-.00079	.00000	-.00144	-.00008	-.00001	.72567

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ0004) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMEP = 32.3010 IN.  
 LREF = 14.2440 IN. YMEP = 10000 IN.  
 BREF = 28.1004 IN. ZMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRLON = -11.7000  
 SPDBRM = 25.0000  
 ELEV-L = 5.0000  
 ELEV-H = -5.0000

RUN NO. 117/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	CLMFD	CAF	CAB	CDF	L/D
.899	-1.671	-1.1156	.08070	.07940	-1.11650	.06360	614.20000	.04547	.03193	.04604	-1.43093
.903	.215	-.06600	.08030	.08050	-.06570	.06330	614.20000	.04566	.03184	.04541	-.02241
.902	1.245	-.08770	.07930	.07940	-.08600	.05860	614.20000	.04599	.03141	.04586	-.03740
.908	1.763	.02330	.07940	.07860	.02580	.05690	614.20000	.04593	.03167	.04371	.03449
.906	3.608	.14080	.08320	.07990	.14620	.04840	614.20000	.04735	.03255	.04600	1.45206
.905	5.604	.24430	.10250	.07790	.25120	.03750	614.20000	.04477	.03137	.04362	2.10163
.902	7.722	.34630	.12440	.07670	.35990	.03350	614.20000	.04261	.03267	.04179	2.73467
.901	9.720	.43140	.15120	.07640	.44970	.03160	614.20000	.04262	.03278	.04179	2.81811
.901	12.770	.56510	.21160	.08050	.59760	.02570	614.20000	.04260	.03345	.04179	2.83299
.902	15.420	.65890	.28550	.08440	.74340	.01550	614.20000	.04225	.04215	.04215	2.84464
.904	18.430	.81280	.37030	.08660	.88900	.02730	614.20000	.03548	.05102	.03291	2.81141
.907	22.010	.96870	.45940	.08500	.99370	.05170	614.20000	.02715	.05163	.03759	1.71113
.901	25.120	.99500	.52210	.08850	1.04100	.11170	614.20000	.03617	.04233	.04546	1.71113
.900	29.160	.96930	.63150	.08610	1.11800	.13250	614.20000	.04060	.04041	.04591	1.51569
GRADIENT	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000

RUN NO. 116/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	CLMFD	CAF	CAB	CDF	L/D
1.050	-1.649	-.07700	.14110	.14030	-.07860	.06140	627.90000	.03405	.05625	.03423	-1.54514
1.052	.130	-.02570	.13940	.13950	-.02520	.05220	627.90000	.03437	.05493	.03443	-.01814
1.052	1.209	.04350	.14240	.14140	.04650	.03860	627.90000	.03700	.05437	.03600	.03161
1.053	1.639	.07480	.14360	.14150	.07870	.03290	627.90000	.03683	.05453	.03627	.01171
1.050	3.617	.11940	.15140	.13690	.20310	.01270	627.90000	.03504	.05106	.03620	1.29161
1.050	5.585	.30960	.16820	.13720	.32400	-.01450	627.90000	.03427	.05163	.03543	1.62347
1.047	7.640	.41920	.19130	.13950	.44090	-.02150	627.90000	.03727	.05467	.03710	2.01142
1.049	9.598	.51980	.22090	.13120	.54940	-.02450	627.90000	.03545	.05374	.03611	2.33134
1.046	12.630	.67490	.26470	.12060	.72060	-.03510	627.90000	.03430	.05223	.03471	1.07171
1.046	15.690	.82230	.36740	.09110	.89110	-.04790	627.90000	.03436	.05166	.03416	3.02346
1.042	18.740	.96710	.46170	.10650	1.06500	-.05790	627.90000	.03355	.05374	.03374	2.81113
1.031	21.760	1.07800	.56560	.12370	1.21140	-.06610	627.90000	.03163	.04717	.03543	1.62347
1.046	24.860	1.12240	.65790	.12490	1.29400	-.07170	627.90000	.03294	.04196	.03296	1.71113
1.053	28.960	1.12400	.76220	.12260	1.35300	.03460	627.90000	.03130	.03944	.03130	1.71113
GRADIENT	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000





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TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C H F W V NOM. RN/L

(REJ004) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 PREF = 20.1804 IN.  
 SCALE = .0300 SCALE

XREF = 32.3010 IN.  
 YREF = .0000 IN.  
 ZREF = 11.2500 IN.

BETA =  
 AIRCON =  
 SPDRK =  
 ELEV-L =

ELEWIN = .000  
 BDELAP = -11.700  
 RUDDER = .000  
 ELEV-R = -5.000

## PARAMETRIC DATA

RUN NO. 1157 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.202	-1.662	-0.05880	.14930	.14760	-.06050	.04470	567.10000	.09654	.05106	.03723	-139846
1.200	.132	-.01210	.14760	.14760	-.01170	.03510	567.10000	.09663	.05097	.03660	-108158
1.200	1.152	.04900	.14680	.14760	.03200	.02230	567.10000	.09643	.05137	.03746	.32939
1.199	1.645	.07700	.14360	.14740	.08130	.01690	567.10000	.09588	.05152	.03817	.51469
1.195	3.560	.18760	.15840	.14640	.19700	-.00330	567.10000	.09454	.05166	.11659	1.18427
1.199	5.525	.29430	.17400	.14480	.30970	-.02240	567.10000	.09290	.05190	.12228	1.69203
1.199	7.574	.40250	.19590	.14110	.42480	-.03500	567.10000	.08784	.05326	.14306	2.05501
1.197	9.554	.50550	.22370	.13670	.53560	-.04500	567.10000	.08212	.05458	.16388	2.25963
1.198	12.570	.65710	.28300	.13320	.70290	-.05860	567.10000	.07518	.05802	.22635	2.32194
1.197	15.640	.80700	.36430	.13290	.87530	-.06820	567.10000	.07121	.06169	.30455	2.21749
1.198	18.680	.93400	.45390	.13080	1.03000	-.07760	567.10000	.06546	.06534	.39190	2.05784
1.195	21.710	1.02800	.54610	.12720	1.15700	-.07750	567.10000	.05894	.06806	.48274	1.88200
1.198	24.750	1.10100	.64270	.12240	1.26900	-.05710	567.10000	.05101	.07139	.57761	1.71409
1.196	28.790	1.15800	.76410	.11170	1.38300	-.02660	567.10000	.03490	.07630	.63664	1.51814
	GRADIENT	.05837	.04246	-.00229	.06100	-.01138	.00200	-.00050	.00021	.00027	.37476

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM. RN/L

(REJ005) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -15.000  
 ALLEON = 5.0000 BDFLAP = -11.700  
 SPBRK = 25.0000 RUDDER = .0000  
 ELEV-L = -5.0000 ELEV-R = -15.000

RUN NO. 159/0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF/D	Q	CAF	CAB	COF	L/D
.600	-7.74	-27690	.07590	.07250	-27780	.13400	483.20000	.04240	.13310	.04581	-3.64777
.600	-7.74	-23120	.07130	.07250	-23080	.13340	483.20000	.04284	.12966	.04160	-3.24416
.600	1.376	-18340	.06800	.07250	-18210	.13360	483.20000	.04206	.13024	.03781	-2.73062
.598	1.442	-16050	.06660	.07170	-15830	.13370	483.20000	.04191	.12979	.03740	-2.41110
.598	1.732	-07270	.06220	.06690	-06840	.13480	483.20000	.04117	.12873	.03350	-1.01674
.597	1.814	.02210	.06070	.05810	.02810	.13480	483.20000	.03945	.12874	.03184	.03640
.597	7.463	.12020	.06410	.04710	.12780	.13530	483.20000	.03916	.12834	.03166	.127346
.598	9.663	.22360	.07170	.03240	.23200	.13610	483.20000	.04059	.12890	.03430	3.11277
.598	12.940	.34050	.10020	.01250	.33920	.13470	483.20000	.03167	.12945	.07110	3.80613
.597	15.970	.51610	.16780	.01390	.56180	.12760	483.20000	.03155	.13145	.13720	3.19710
.599	19.020	.67320	.24610	.01330	.71660	.12750	483.20000	.03213	.03344	.21445	2.33560
.598	22.050	.81500	.34420	.01310	.88460	.13410	483.20000	.03254	.03300	.30090	0.26730
.597	25.070	.90730	.43330	.00780	1.02620	.14730	483.20000	.03562	.33310	.34362	0.03562
.598	28.070	.94640	.46040	.01770	.97720	.15610	483.20000	.03370	.03440	.44020	0.72100
	GRADIENT	.04548	-.00299	-.00124	.04663	.00021	.00000	-.00097	-.00027	-.00270	.55710

RUN NO. 158/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF/D	Q	CAF	CAB	COF	L/D
.602	-7.722	-27650	.07460	.06110	-27350	.14690	640.60000	.04992	.03118	.05344	-3.02370
.602	-7.412	-22150	.07540	.06110	-22120	.14490	640.60000	.05105	.02995	.04945	-2.73070
.602	1.420	-17160	.07530	.07950	-16960	.14290	640.60000	.04930	.03014	.04511	-2.02790
.601	1.919	-14710	.07410	.07930	-14440	.14210	640.60000	.04923	.02977	.04427	-1.36070
.601	3.642	-04610	.07100	.07390	-04120	.14110	640.60000	.04461	.03029	.04072	-.04036
.601	5.915	.06200	.07210	.06530	.06910	.13750	640.60000	.03507	.02946	.04072	.04036
.798	7.939	.17150	.08160	.05720	.16060	.13150	640.60000	.02874	.02844	.05343	2.11021
.799	9.935	.28370	.10640	.05590	.29780	.12350	640.60000	.02558	.02932	.07756	2.12022
.798	12.980	.41970	.15510	.05700	.44320	.12320	640.60000	.02447	.03151	.12410	2.71010
.600	16.060	.54400	.22140	.06270	.58410	.12030	640.60000	.02375	.03095	.13010	3.45000
.798	19.120	.67370	.29390	.06240	.73480	.11730	640.60000	.02557	.03727	.26400	3.02460
.796	22.190	.78370	.38470	.06000	.87100	.11620	640.60000	.01510	.04424	.34364	2.11730
.797	25.310	.76650	.44290	.06420	.99030	.11490	640.60000	.02013	.03541	.33220	1.70070
.799	29.250	.81360	.53530	.06950	.97140	.12100	640.60000	.02300	.03641	.47734	1.67000
	GRADIENT	.05043	-.00294	-.00160	.05171	-.00025	.00000	-.00140	-.00015	.00000	.55000



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W Y NOM. RN/L

(REJ05) (03 APR 74)

## REFERENCE DATA

SECF = 2.4215 S2.FT. XMRP = 32.3010 IN.  
 CSECF = 14.2441 IN. YMRP = 10000 IN.  
 BSECF = 24.114 IN. ZMRP = 11.2510 IN.  
 SCALE = 10300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AIRLON = 5.000 BDFLAP = -11.700  
 SFCBRK = 25.000 RUDDER = .000  
 ELEV-L = -5.000 ELEV-R = -15.000

RUN NO. 1577 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.034	-1.710	-2.010	.10250	.15940	-2.0220	.16710	616.70000	.06400	.03500	.06749	-2.74129
1.035	-1.482	-2.1650	.09560	.15710	-2.1580	.16130	616.70000	.06573	.03137	.06422	-2.26475
1.042	-1.440	-1.9530	.09260	.15650	-1.1530	.15510	616.70000	.06426	.03224	.06037	-1.66761
1.044	-1.939	-1.1230	.09210	.15620	-1.1200	.15160	616.70000	.06369	.03251	.05998	-1.34115
1.051	-1.657	-1.0620	.09210	.15620	-1.0600	.15590	616.70000	.06017	.03213	.06003	-1.6742
1.056	-1.1510	-1.1490	.08800	.15600	-1.2470	.11720	616.70000	.05735	.03145	.06365	1.1424
1.059	-1.619	-1.2270	.11650	.15500	-2.4360	.10480	616.70000	.06465	.03035	.08691	1.9466
1.062	-1.3540	-1.4380	.14380	.15400	-3.5510	.09410	616.70000	.05374	.03366	.11362	2.33318
1.069	-1.7790	-1.9690	.19690	.15370	-5.0370	.08200	616.70000	.04370	.03610	.16190	2.42566
1.073	-1.6120	-2.6300	.26300	.15300	-6.6030	.07980	616.70000	.04893	.03977	.22554	2.24493
1.076	-1.7060	-3.4260	.34260	.15200	-7.9270	.09130	616.70000	.04259	.04575	.29882	2.10637
1.089	-2.0890	-7.9670	.42600	.15100	-8.9630	.12550	616.70000	.03754	.05256	.37185	1.63424
1.093	-2.5230	-4.8720	.48720	.14900	-10.9240	.18490	616.70000	.02772	.06468	.42874	1.67733
1.093	-2.9200	-5.9660	.59660	.14910	-1.05900	.20740	616.70000	.01620	.07390	.53016	1.47401
GRADIENT	.06127	-.00214	-.00129	-.00129	.06188	-.00689	.00000	-.00096	-.00043	-.00171	.59202

RUN NO. 1567 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.034	-1.677	-2.1500	.15810	.15550	-2.1760	.15340	627.80000	.03980	.05562	.10244	-1.36499
1.038	-1.342	-1.1430	.15630	.15710	-1.1420	.15660	627.80000	.01190	.05612	.10013	-.91672
1.055	-1.359	-1.0760	.15200	.15380	-1.0720	.12270	627.80000	.03853	.05527	.09678	-.50271
1.055	-1.890	-1.0410	.15390	.15320	-1.0360	.11520	627.80000	.03993	.05567	.09829	-.26710
1.054	-1.771	-1.0790	.15870	.15320	-1.0890	.09220	627.80000	.03601	.05519	.10369	.49960
1.060	-1.9710	-1.7330	.17330	.14960	-2.1330	.07350	627.80000	.03497	.05463	.11594	1.15769
1.060	-3.0540	-1.6920	.16920	.14820	-3.2680	.05960	627.80000	.03381	.05539	.13432	1.61654
1.0748	-1.750	-1.2130	.12690	.13690	-1.6170	.05330	627.80000	.06545	.05525	.15917	1.91596
1.080	-1.820	-1.2610	.13600	.13690	-1.7920	.04200	627.80000	.07192	.05490	.21246	2.12127
1.080	-1.670	-1.3600	.13600	.13500	-1.3390	.01370	627.80000	.06343	.05302	.26533	2.13919
1.080	-2.1900	-1.00400	.100400	.12700	-1.13300	.00400	627.80000	.06391	.05747	.37239	1.99925
1.080	-1.440	-1.04300	.104300	.12700	-1.20800	.04300	627.80000	.04688	.07319	.47261	1.85754
1.080	-2.490	-1.04300	.104300	.12700	-1.20800	.04300	627.80000	.04688	.07319	.47261	1.85754
1.082	-2.9040	-1.05100	.105100	.12320	-1.27100	.05650	627.80000	.03613	.06717	.55170	1.67283
GRADIENT	.06613	.00007	-.00066	-.00066	.06886	-.00366	.00000	-.00052	-.00014	.00026	.41848

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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NDM. RN/L

(REJ005) (03 APR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .0000 ELEVON = -10.000  
 AILRON = 5.0000 BDFLAP = -11.700  
 SPDRK = 25.0000 RIDER = .0000  
 ELEV-L = -5.0000 ELEV-R = -15.000

PARAMETRIC DATA

RUN NO. 155/1 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/C
1.195	-1.675	-16560	.16130	.16400	-.16050	.11940	568.40000	.17840	.15155	.1142	-1.02859
1.200	-.262	-110840	.15860	.15910	-.10760	.10420	568.40000	.15669	.15241	.10615	-.68349
1.204	1.274	-.04700	.15710	.15410	-.04350	.08950	568.40000	.10665	.05145	.10566	-.29921
1.201	1.720	-.02120	.15680	.15730	-.01640	.08500	568.40000	.15629	.05701	.10575	-.13471
1.201	1.653	.09440	.16080	.15450	.10440	.06200	568.40000	.11291	.05159	.10936	.58658
1.203	5.622	.20190	.17210	.15150	.21780	.04350	568.40000	.09577	.05171	.12063	1.17316
1.203	7.591	.30340	.19040	.14750	.33210	.03100	568.40000	.03535	.05155	.13394	1.62000
1.199	9.550	.41470	.21430	.14240	.44480	.02030	568.40000	.00940	.05370	.16255	1.73187
1.193	12.870	.57650	.27150	.13840	.62210	.00760	568.40000	.002	.05738	.21549	2.12377
1.190	15.720	.72480	.34510	.10540	.79120	-.00330	568.40000	.07504	.06076	.26660	2.19001
1.188	18.770	.85930	.43140	.13100	.95240	-.02040	568.40000	.06751	.06437	.37040	1.05219
1.174	21.810	.96400	.52210	.12560	1.08300	-.01690	568.40000	.05902	.05758	.45819	1.6563
1.196	24.300	1.03900	.61380	.12100	1.20000	-.00330	568.40000	.04944	.07156	.54474	1.63170
1.197	26.000	1.10240	.71400	.11170	1.32000	.00350	568.40000	.03568	.07582	.66055	1.43861
	GRADIENT	.06031	-.06018	-.06128	.06306	-.01316	.00000	-.02019	-.00010	-.00007	.00000



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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V RN/L = 3.0

(REJ006) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 12.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BET = .000 ELEVON = 7.500  
 ALLCON = -7.500 BOFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 1087 0 RN/L = 2.97 GRADIENT INTERVAL = -3.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.600	-1.607	.03200	.07690	.07730	.03120	-.1450	353.50000	.03827	.03903	.03794	.41600
.620	.070	.05940	.07740	.07740	.05950	-.01530	353.50000	.03790	.03950	.03798	.76681
.640	1.614	.11360	.07910	.07530	.13580	-.01500	353.50000	.03586	.03944	.03967	1.64943
.660	3.567	.22660	.08450	.07030	.23140	-.01620	353.50000	.03085	.03945	.04519	2.67948
.680	5.563	.32130	.09320	.06160	.32880	-.01700	353.50000	.02294	.03866	.05470	3.44781
.700	7.632	.42570	.10670	.04920	.43610	-.02140	353.50000	.01106	.03814	.06888	3.99037
.720	9.626	.53060	.12580	.03530	.54410	-.02480	353.50000	-.00204	.03734	.08899	4.21714
.740	12.650	.63270	.14320	.02710	.71600	-.03120	353.50000	-.01276	.03988	.14433	3.74016
.760	15.730	.81460	.26360	.03290	.85590	-.03120	353.50000	-.01119	.04409	.22116	3.09010
.780	18.750	.95740	.36760	.04030	1.02500	-.04170	353.50000	-.00636	.04868	.32345	2.60488
.800	21.790	1.06400	.46490	.03650	1.16100	-.03180	353.50000	-.01646	.05236	.41569	2.24992
.820	24.820	1.06900	.53520	.03120	1.26700	-.01970	353.50000	-.03171	.06291	.47788	2.02528
.840	28.780	.97290	.57840	.03850	1.13100	-.10230	353.50000	-.03659	.07769	.51070	1.68221
GRADIENT		.04697	.00182	-.00173	.04832	-.05333	.00000	-.00180	.00927	.00176	.54761

RUN NO. 1077 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.600	-1.627	.03460	.08190	.08290	.03370	-.03470	446.10000	.04190	.04010	.04186	.05610
.620	.085	.03830	.08220	.08210	.03840	-.03510	446.10000	.04301	.03909	.04306	.48591
.640	1.621	.11920	.08370	.08030	.12160	-.03830	446.10000	.04646	.03384	.04988	1.42496
.660	3.575	.22470	.08980	.07360	.22990	-.01130	446.10000	.03832	.03728	.05258	2.50298
.680	5.554	.33650	.10400	.07090	.34500	-.01990	446.10000	.03325	.03765	.06648	3.23707
.700	7.620	.44140	.12560	.06590	.45410	-.02420	446.10000	.02756	.03334	.08753	3.51583
.720	9.608	.51970	.15630	.06740	.53890	-.02270	446.10000	.02830	.03910	.11778	3.32428
.740	12.660	.64640	.21660	.06970	.67820	-.02220	446.10000	.02786	.04184	.17582	2.98387
.760	15.710	.77450	.30880	.07990	.82700	-.03350	446.10000	.03326	.04664	.25534	2.57436
.780	18.770	.90160	.38980	.07890	.97910	-.02830	446.10000	.02692	.05131	.34080	2.31339
.800	21.850	.97270	.47190	.07600	1.07800	-.00520	446.10000	.01579	.06021	.41586	2.06100
.820	24.930	.94390	.52460	.07780	1.07700	.07490	446.10000	.02240	.07540	.45615	1.79947
.840	28.950	.96160	.62520	.08770	1.14300	.10350	446.10000	-.00224	.08438	.55130	1.53643
GRADIENT		.05261	.00188	-.00157	.05407	-.02165	.00000	-.00075	-.00082	.00271	.58544

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V RN/L = 3.0

(REJ006) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.2010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0500 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 7.500  
 AIRLON = -7.500 BDELAP = -11.700  
 S\*\*RK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 106/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
1.055	-0.636	.00420	.09300	.03300	.00320	-.00210	488.10000	.05375	.03925	.05371	.04553
1.054	.069	.04540	.09450	.09450	.04550	-.00540	488.10000	.05559	.05891	.05564	.48000
1.055	1.169	.17530	.09900	.09900	.13800	-.01500	488.10000	.05625	.03897	.06004	1.36687
1.054	3.559	.24710	.10910	.03360	.25340	-.02400	488.10000	.05642	.03716	.07196	2.26601
1.055	5.540	.34800	.12600	.00180	.35850	-.02360	488.10000	.05348	.03832	.08784	2.76203
1.054	7.591	.45210	.15560	.09450	.46870	-.03990	488.10000	.05528	.03924	.11669	2.94582
1.053	9.566	.55190	.18620	.09530	.55540	-.03750	488.10000	.05443	.04086	.14598	2.85518
1.052	12.610	.65800	.24770	.09800	.69620	-.04320	488.10000	.05294	.04506	.20365	2.65720
1.051	15.680	.75370	.33070	.10360	.85350	-.05130	488.10000	.05395	.04985	.28361	2.41060
1.050	18.750	.89650	.41370	.10550	.91900	-.05730	488.10000	.04499	.05740	.35823	2.18746
1.050	21.820	.96310	.49600	.10400	1.07900	-.06250	488.10000	.03750	.06740	.43537	1.92342
1.050	24.930	.95240	.55690	.10360	1.09800	-.06800	488.10000	.02224	.06136	.48209	1.74500
1.050	28.950	1.01500	.67540	.09550	1.21500	-.08890	488.10000	.01265	.01685	.59218	1.57500
GRADIENT		.05823	.00367	.00008	.05999	-.00534	.00000	.00751	.00046	.00134	.51677

RUN NO. 105/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
1.055	-0.630	.00640	.15480	.15400	.00670	-.00260	537.80000	.09589	.05901	.05581	.05427
1.054	.128	.05530	.15520	.15310	.05560	-.00700	537.80000	.09560	.05950	.09572	.35506
1.055	1.823	.16600	.16110	.15500	.17110	-.02890	537.80000	.03702	.05878	.10242	1.03036
1.055	3.982	.30000	.17680	.15500	.31160	-.05340	537.80000	.09688	.05862	.11829	1.69717
1.055	6.190	.43000	.20070	.15300	.44910	-.07490	537.80000	.09497	.05823	.14284	2.18188
1.051	8.389	.54600	.23070	.14850	.57470	-.08750	537.80000	.08844	.06006	.17134	2.38998
1.050	10.580	.65610	.27110	.14600	.69470	-.09500	537.80000	.08386	.06214	.20999	2.40334
1.052	13.880	.81060	.35360	.14870	.87180	-.11020	537.80000	.08218	.06652	.28892	2.29332
1.052	17.240	.97340	.45570	.14600	1.06500	-.11170	537.80000	.07482	.07198	.38710	2.17592
1.053	20.510	1.10700	.56890	.14480	1.23600	-.11900	537.80000	.06876	.07604	.49746	1.94647
1.052	23.640	1.16200	.66530	.14360	1.33100	-.08120	537.80000	.05961	.08399	.58833	1.74626
1.054	26.680	1.16900	.74400	.14010	1.37800	-.03600	537.80000	.05068	.08946	.66198	1.57856
1.054	29.210	1.17300	.81000	.13510	1.42000	-.03600	537.80000	.04120	.09390	.72893	1.44718
GRADIENT		.06343	.00486	.00014	.06632	-.00440	.00000	.00028	.00014	.00502	.35720

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## TABULATED SOURCE DATA - OA53A

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ARC 11-747 OA53A B C M F W V RN/L = 3.0

(REJ006) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 7.500  
 AILRON = -7.500 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 104/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CCF	L/D
1.203	-.630	.01010	.15870	.15880	.00840	-.00360	570.50000	.10307	.05573	.10298	.06393
1.202	.107	.05200	.15930	.15920	.02230	-.01300	570.50000	.10327	.05593	.10337	.32646
1.206	1.764	.14790	.16380	.15910	.15290	-.03240	570.50000	.10378	.05532	.10844	.90349
1.200	3.872	.26960	.17650	.15790	.28090	-.05650	570.50000	.10261	.05529	.12135	1.52739
1.199	6.051	.39180	.19790	.15550	.41050	-.07800	570.50000	.09972	.05578	.14244	1.97983
1.198	8.271	.51170	.22770	.15180	.53910	-.09380	570.50000	.09461	.05719	.17118	2.24633
1.198	10.450	.62160	.26470	.14750	.65930	-.10160	570.50000	.08866	.05884	.20678	2.34893
1.193	13.750	.78750	.34370	.14670	.84660	-.11530	570.50000	.08428	.06242	.28309	2.29102
1.197	17.110	.94280	.44380	.14680	1.03200	-.12830	570.50000	.08044	.06636	.38050	2.12454
1.196	20.390	1.05900	.54710	.14390	1.18400	-.12800	570.50000	.07479	.06911	.48262	1.93584
1.199	23.620	1.13200	.64580	.13810	1.29600	-.10870	570.50000	.06614	.07196	.57987	1.75302
1.195	26.790	1.17600	.74140	.13180	1.38400	-.08030	570.50000	.05414	.07766	.67213	1.58613
1.195	29.220	1.20600	.81800	.12530	1.45200	-.06250	570.50000	.04446	.08084	.74762	1.47410
1.195		.05769	.00400	-.00022	.06058	-.01170	-.00000	-.00009	-.00013	.00416	.32529

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V HIGH RN/L

(REJ007) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILRON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 294/ 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.598	-1.554	.21070	.08400	.08670	.20980	-.12010	782.90000	.04545	.04055	.04342	2.50841
.597	-.072	.23950	.08600	.08570	.23960	-.12070	782.90000	.04530	.04040	.04360	2.78468
.599	1.091	.28620	.08960	.08420	.28790	-.12180	782.90000	.04436	.03984	.04984	3.13233
.597	1.600	.31250	.09220	.08350	.31490	-.12310	782.90000	.04340	.04010	.05217	3.36658
.597	3.548	.41000	.10280	.07730	.41560	-.12620	782.90000	.03882	.03868	.06427	3.98576
.598	7.627	.62410	.14010	.05610	.63720	-.13760	782.90000	.01780	.03630	.10221	4.45241
.597	9.599	.74350	.16930	.04290	.76130	-.14610	782.90000	.00414	.03876	.13103	4.59291
.598	12.630	.90710	.23180	.02790	.93590	-.15070	782.90000	-.01036	.03820	.19453	3.91245
.598	15.670	1.02300	.32300	.03560	1.07200	-.14750	782.90000	-.00778	.04230	.26205	3.16800
.596	18.710	1.13100	.42700	.04170	1.20800	-.14360	782.90000	-.00741	.04910	.38048	2.64823
.597	21.750	1.22100	.53850	.04750	1.33400	-.13670	782.90000	-.00822	.05572	.48669	2.26845
.596	24.710	1.23600	.62000	.04650	1.38200	-.08740	782.90000	-.02040	.06690	.55917	1.99371
.598	28.680	1.09800	.66550	.03790	1.28100	-.00450	782.90000	-.03202	.08992	.58668	1.64679
GRADIENT		.04866	.00461	-.00215	.05024	-.00192	.00000	-.00170	-.00045	.00510	.35872

RUN NO. 293/ 0 RN/L = 5.52 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.800	-.580	.18480	.09020	.09210	.18390	-.11590	840.90000	.05199	.04011	.05012	2.04830
.800	.062	.21620	.09250	.09220	.21630	-.11810	840.90000	.05186	.04034	.05209	2.33093
.799	1.104	.27420	.09660	.09130	.27600	-.12200	840.90000	.05130	.04000	.05661	2.83833
.800	1.802	.30080	.09940	.09090	.30340	-.12370	840.90000	.05077	.04013	.05924	3.03710
.798	3.564	.41250	.11220	.08630	.41870	-.13220	840.90000	.04670	.03960	.07264	3.67798
.800	7.611	.65780	.16430	.07640	.67380	-.15680	840.90000	.03719	.03921	.12611	3.98707
.800	9.576	.72640	.20010	.07650	.74960	-.15130	840.90000	.03710	.03940	.16128	3.62971
.798	12.590	.83860	.26670	.07750	.87660	-.14680	840.90000	.03429	.04321	.22454	3.14433
.799	15.660	.97110	.36240	.08680	1.03300	-.15630	840.90000	.03804	.04876	.31546	2.67968
.799	18.710	1.08000	.46350	.09230	1.17200	-.15320	840.90000	.03594	.05636	.41000	2.33171
.799	21.760	1.11700	.55170	.09850	1.24200	-.11670	840.90000	.02850	.07000	.48690	2.02184
.796	24.690	1.07800	.60730	.09850	1.23300	-.04560	840.90000	.00913	.09227	.52333	1.77534
.802	28.710	1.10400	.71440	.09640	1.31100	-.01470	840.90000	.00470	.09170	.63390	1.54485
GRADIENT		.05520	.00513	-.00143	.05692	-.00394	.00000	-.00129	-.00014	.00549	.39385



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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V HIGH RN/L

(REJ007) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2300 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILRON = .000 BDFLAP = 16.300  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 292/ 0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDP	L/D
.900	-0.614	.16550	.10100	.10280	.16440	-.11460	786.30000	.06174	.04206	.05898	1.63803
.903	.080	.20290	.10440	.10410	.20300	-.11880	786.30000	.06202	.04208	.06230	1.94334
.899	1.091	.26630	.10900	.10390	.26830	-.12640	786.30000	.06142	.04248	.06652	2.44310
.897	1.641	.30020	.11190	.10330	.30320	-.13070	786.30000	.06129	.04201	.06994	2.68105
.901	3.549	.42220	.12940	.10300	.42940	-.14730	786.30000	.06102	.04198	.08749	3.26318
.899	7.570	.65250	.18960	.10200	.67180	-.17660	786.30000	.05992	.04208	.14790	3.44128
.899	9.573	.73660	.22760	.10190	.76420	-.17410	786.30000	.05643	.04547	.18273	3.23685
.901	12.590	.84390	.29880	.10760	.88880	-.17380	786.30000	.05978	.04782	.25208	2.82505
.899	15.680	.97610	.39420	.11580	1.04600	-.18370	786.30000	.06002	.05578	.34049	2.47542
.901	18.750	1.07500	.49150	.11990	1.17600	-.17420	786.30000	.05581	.06409	.43086	2.18706
.903	21.770	1.11400	.58180	.12740	1.25000	-.14370	786.30000	.04723	.08017	.50747	1.91368
.897	24.730	1.08500	.64190	.12910	1.25400	-.06380	786.30000	.03223	.09687	.55388	1.69037
.902	28.720	1.15200	.76630	.11820	1.37900	-.03800	786.30000	.02294	.09526	.68277	1.50403
GRADIENT		.06204	.00677	-.00007	.06404	-.00792	.00000	-.00005	.00003	.00681	.39579

RUN NO. 291/ 0 RN/L = 4.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDP	L/D
1.051	-0.546	.14240	.16610	.16770	.14050	-.11020	819.40000	.10398	.06372	.10239	.85718
1.054	.075	.18770	.16810	.16780	.18800	-.11940	819.40000	.10475	.06305	.10500	1.11743
1.052	1.111	.25520	.17310	.16810	.25850	-.13390	819.40000	.10548	.06262	.11047	1.47441
1.052	1.577	.28970	.17600	.16800	.29440	-.14130	819.40000	.10602	.06198	.11408	1.64547
1.052	3.543	.42080	.19450	.16810	.43200	-.16840	819.40000	.10641	.06169	.13290	2.16370
1.051	7.592	.66130	.25650	.16690	.68940	-.20950	819.40000	.10411	.06279	.19428	2.57800
1.048	9.592	.77590	.29820	.16470	.81480	-.22180	819.40000	.09777	.06693	.23218	2.80244
1.050	12.600	.91340	.37250	.16420	.97270	-.22500	819.40000	.09356	.07064	.30350	2.45267
1.051	15.710	1.04100	.47180	.17240	1.13000	-.22470	819.40000	.09323	.07917	.39571	2.20607
1.050	18.710	1.16100	.57720	.17410	1.28500	-.22510	819.40000	.08973	.08437	.49719	2.01221
1.051	21.750	1.24700	.68040	.17010	1.41000	-.21400	819.40000	.08425	.08585	.60874	1.83194
1.049	24.770	1.30100	.78600	.16800	1.51000	-.18600	819.40000	.07751	.09129	.70303	1.65455
1.051	28.690	1.28500	.89210	.16380	1.55600	-.11860	819.40000	.06423	.10157	.80333	1.44030
GRADIENT		.06672	.00686	.00010	.06984	-.01399	.00000	.00057	-.00048	.00737	.31223

ARC 11-747 OM33A B C H F M V HIGH RN/L

(REJ007) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.0000  
 AILRON = .0000 BDFLAP = 16.3000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 290/0 RN/L = 4.29 GRADIENT INTERVAL = -5.00/ 5.00

WCH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.197	-662	.12420	.17050	.17190	.12220	-.10100	823.00000	.11305	.05885	.11163	.72842
1.200	.041	.16560	.17140	.17130	.16570	-.10920	823.00000	.11350	.05780	.11362	.96594
1.205	1.110	.22970	.17700	.17250	.23310	-.12390	823.00000	.11371	.05679	.11820	1.29795
1.204	1.613	.25490	.18020	.17290	.25990	-.12980	823.00000	.11454	.05836	.12181	1.41512
1.204	2.531	.36630	.19640	.17340	.37770	-.15320	823.00000	.11480	.05860	.13785	1.86572
1.198	7.562	.59610	.25130	.17060	.62400	-.19630	823.00000	.11544	.06016	.19160	2.37278
1.201	9.591	.71160	.29000	.16740	.74990	-.21140	823.00000	.10608	.06132	.22954	2.45351
1.202	12.580	.87020	.36480	.16660	.92870	-.22660	823.00000	.10230	.06430	.30212	2.38471
1.201	15.670	.99790	.45540	.16890	1.08400	-.22980	823.00000	.09990	.06900	.38858	2.19165
1.201	18.740	1.11000	.55540	.16950	1.22900	-.22990	823.00000	.09620	.07330	.44595	1.99761
1.200	21.690	1.19200	.65370	.16690	1.34900	-.22030	823.00000	.09102	.07588	.58314	1.83330
1.200	24.700	1.25100	.76040	.16790	1.45500	-.20050	823.00000	.08487	.08303	.68510	1.54004
1.197	28.650	1.30200	.88570	.15300	1.56700	-.16910	823.00000	.07017	.08283	.81289	1.27888
GRADIENT	.05762	.00634	.00634	.00246	.06031	-.01253	-.00000	.00043	.00000	.00632	.26945

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## TABULATED SOURCE DATA - 04533A

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(REJ008) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAP = 16.300  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 295/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.598	-.583	.20670	.08460	.08670	.20590	-.11920	476.30000	.04489	.04181	.04279	2.44406
.598	.080	.23470	.08660	.08630	.23490	-.12050	476.30000	.04660	.03970	.04692	2.71020
.597	1.100	.28550	.09190	.08540	.28720	-.12150	476.30000	.04510	.04030	.05061	3.14097
.597	1.602	.30730	.09300	.08440	.31030	-.12320	476.30000	.04443	.03997	.05309	3.30830
.597	3.540	.40770	.10400	.07870	.41340	-.12660	476.30000	.03962	.03908	.06507	3.91785
.598	7.619	.62060	.14130	.05780	.63390	-.13870	476.30000	.01930	.03850	.10317	4.39126
.598	9.580	.73670	.16950	.04450	.75470	-.14650	476.30000	.00621	.07829	.13173	4.34723
.598	12.630	.89480	.23840	.03700	.92530	-.15230	476.30000	-.00217	.03917	.20020	3.75304
.599	15.690	1.06100	.32770	.04490	1.05200	-.14600	476.30000	.00126	.04364	.28571	3.05338
.598	18.730	1.13300	.43530	.05150	1.20400	-.15240	476.30000	.00461	.04689	.39098	2.58092
.598	21.730	1.23000	.54680	.05230	1.34500	-.13940	476.30000	-.00446	.05676	.49382	2.25060
.598	24.720	1.22400	.61770	.04930	1.37000	-.08940	476.30000	-.01716	.06646	.55732	1.98130
.598	28.660	1.08800	.66680	.06310	1.27500	.00270	476.30000	-.02784	.09094	.58708	1.63228
GRADIENT		.04898	.00475	-.00196	.05056	-.00179	.00000	-.00145	-.00050	.00528	.35769

RUN NO. 296/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.799	-.616	.15660	.09020	.09190	.15590	-.11470	640.70000	.05165	.04025	.04997	1.73890
.799	.067	.18450	.09190	.09160	.18460	-.11680	640.70000	.05095	.04065	.05117	2.00934
.799	1.099	.23230	.09590	.09150	.23410	-.11920	640.70000	.05006	.04144	.05454	2.42049
.799	1.601	.25660	.09800	.09080	.25930	-.12110	640.70000	.05062	.04018	.05785	2.61875
.800	3.557	.35810	.11010	.08770	.36420	-.12840	640.70000	.04660	.04110	.06910	3.25133
.799	7.596	.58370	.15480	.07630	.59900	-.15150	640.70000	.03675	.03955	.11560	3.77014
.799	9.581	.67660	.18900	.07380	.69860	-.15600	640.70000	.03536	.03844	.15114	3.57886
.801	12.600	.76950	.25150	.07750	.80580	-.14880	640.70000	.03685	.04065	.21174	3.06065
.801	15.680	.89100	.33910	.08570	.84950	-.15440	640.70000	.04031	.04539	.29542	2.62735
.799	18.710	1.02900	.44500	.09160	1.11700	-.16070	640.70000	.03854	.05306	.39481	2.31108
.800	21.730	1.09400	.53810	.09470	1.21600	-.13550	640.70000	.03385	.06085	.48165	2.03378
.801	24.730	1.10200	.61620	.09890	1.25800	-.07580	640.70000	.01511	.08379	.54000	1.78745
.799	28.700	1.08200	.70450	.09810	1.28800	-.01250	640.70000	.00372	.09438	.62179	1.53660
GRADIENT		.04850	.00482	-.00100	.05018	-.00326	.00000	-.00115	.00015	.00470	.36319

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## TABULATED SOURCE DATA - QN33A

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ARC 11-747 QN33A B C M W V NOM. RN/L

(REJOUR) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
YMRP = .0000 IN.  
ZMRP = 11.2500 IN.

BETA = .000  
AILRON = .000  
SFOBRK = 25.000  
ELEV-L = 15.000

FLEWON = 15.000  
JDFLAP = 16.300  
RUDDER = .000  
ELEV-R = 15.000

## PARAMETRIC DATA

RUN NO. 297/0 RN/L = 3.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMCD	Q	CAF	CAB	CDF	L/D
.899	-.643	.13760	.10060	.10220	.13650	-.11360	617.10000	.05900	.04320	.05746	1.36735
.898	-.662	.11760	.10260	.10240	.17070	-.11700	617.10000	.05953	.04287	.05972	1.56290
.902	1.036	.22330	.10820	.10400	.22530	-.12310	617.10000	.06036	.04364	.06466	2.06177
.901	1.590	.24860	.11000	.10300	.25160	-.12590	617.10000	.06035	.04265	.06731	2.26161
.901	3.540	.36120	.12580	.10330	.36820	-.14070	617.10000	.06063	.04267	.06825	2.66973
.900	7.604	.58440	.17800	.09910	.60280	-.16980	617.10000	.05614	.04296	.13541	3.28317
.901	9.561	.67250	.21510	.10010	.69890	-.17520	617.10000	.05692	.04318	.17246	3.12743
.899	12.600	.78040	.27990	.10290	.82270	-.17160	617.10000	.05766	.04524	.23573	2.78840
.901	13.670	.90340	.36850	.11080	.96940	-.18100	617.10000	.05988	.05092	.31942	2.42159
.904	18.720	1.02600	.47110	.11680	1.12300	-.18240	617.10000	.06024	.05656	.41747	2.17638
.901	21.740	1.10100	.56990	.12160	1.23400	-.16120	617.10000	.04988	.07172	.50340	1.93185
.901	24.740	1.09400	.64550	.12840	1.26400	-.09740	617.10000	.03643	.09197	.56207	1.69492
.900	28.670	1.12900	.73160	.11790	1.35100	-.03650	617.10000	.02332	.09458	.66862	1.50185
GRADIENT	.05359	.00608	.00227	.05553		-.00651	.00000	.00038	-.00012	.00622	.35167

RUN NO. 298/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMCD	Q	CAF	CAB	CDF	L/D
1.032	-.671	.11180	.16540	.16670	.10980	-.10800	628.50000	.10293	.06377	.10164	67460
1.032	.059	.15120	.16750	.16400	.15140	-.11520	628.50000	.10358	.06342	.10413	.90256
1.032	1.091	.21140	.17150	.16740	.21460	-.11340	628.50000	.10410	.06330	.10817	.53232
1.031	1.612	.24350	.17400	.16720	.24530	-.13490	628.50000	.10519	.06201	.11205	1.36181
1.031	3.561	.36010	.18940	.16670	.37120	-.10930	628.50000	.10471	.06199	.12757	1.90100
1.049	7.594	.59200	.24750	.16710	.61950	-.20200	628.50000	.10302	.06488	.18598	2.39183
1.051	9.581	.69870	.28620	.16590	.73660	-.21740	628.50000	.09951	.06639	.22072	2.44146
1.049	12.610	.84190	.35560	.16330	.89320	-.22410	628.50000	.09362	.06968	.28767	2.36698
1.050	15.670	.97710	.44980	.16920	1.06200	-.22750	628.50000	.09391	.07629	.37630	2.17132
1.049	18.720	1.09500	.55400	.17330	1.21500	-.22780	628.50000	.09319	.08311	.47537	1.97844
1.048	21.720	1.21000	.66940	.17390	1.37200	-.22790	628.50000	.08760	.08630	.58012	1.80824
1.054	24.730	1.26900	.77630	.17400	1.47800	-.20000	628.50000	.08195	.09205	.69275	1.63542
1.050	28.660	1.27700	.88550	.16470	1.54500	-.13010	628.50000	.06697	.09773	.79976	1.44177
GRADIENT	.03879	.00569	.00369	.06188		-.01226	-.00000	.00040	-.00045	.00618	.28925

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## TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F M V NOM. RN/L

(REJ008) (03 APR 74)

## REFERENCE DATA

SREF = 2.210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILRON = .000 BDFLAP = 16.300  
 SFCBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 299/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	q	CAF	CAB	CD	L/D
1.198	-.678	.09470	.17050	.17160	.09270	-.09520	573.20000	.11213	.05947	.11103	.55559
1.201	.061	.12670	.17230	.17220	.12690	-.10250	573.20000	.11314	.05906	.11328	.73529
1.201	1.080	.18210	.17620	.17270	.18540	-.11490	573.20000	.11342	.05928	.11689	1.03376
1.203	1.594	.20840	.17830	.17250	.21330	-.12140	573.20000	.11466	.05784	.12055	1.16849
1.199	3.546	.31500	.19300	.17310	.32630	-.14390	573.20000	.11389	.05921	.13386	1.63239
1.198	7.574	.52260	.24170	.17070	.54990	-.18610	573.20000	.11090	.05980	.18241	2.16228
1.196	9.565	.63310	.27770	.16870	.67040	-.20270	573.20000	.10734	.06136	.21724	2.27918
1.205	12.609	.79150	.34670	.16560	.84810	-.22120	573.20000	.10176	.06384	.28432	2.28363
1.199	15.660	.93760	.43730	.16790	1.02100	-.23060	573.20000	.09888	.06902	.37081	2.14465
1.198	18.700	1.05400	.53530	.16920	1.17000	-.23270	573.20000	.09753	.07167	.46750	1.96865
1.199	21.740	1.15000	.63330	.16780	1.30500	-.22820	573.20000	.09356	.07424	.57027	1.79008
1.198	24.680	1.21700	.74640	.17000	1.41800	-.20890	573.20000	.08791	.08209	.67197	1.63080
1.194	28.660	1.29200	.88570	.15730	1.55900	-.17740	573.20000	.07455	.08275	.81313	1.45929
	GRADIENT	.05262	.00536	.04032	.05577	-.01166	.00000	.00041	-.00009	.00547	.25722

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TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F W V LOW RN/L

(REJ009) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCALE

WMP = 32.3010 IN.  
YMP = .0020 IN.  
ZMP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000  
ELEVON = 15.000  
AILRON = .000  
BDFLAP = 16.300  
SPDRK = 25.000  
RUDDER = .000  
ELEV-L = 15.000  
ELEV-R = 15.000

RUN NO. 304/ 0 RN/L = 1.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CCF	L/D
.596	-1.604	.21260	.08530	.08760	.21170	-.12290	208.10000	.14500	.04159	.04377	2.49068
.600	-1.600	.24310	.08690	.08660	.24320	-.12410	208.10000	.14717	.03943	.04751	2.79534
.598	1.095	.29780	.09070	.08500	.29930	-.12520	208.10000	.14569	.03531	.05140	3.28123
.596	1.602	.31740	.09340	.08450	.31980	-.12400	208.10000	.14459	.03591	.05351	3.74708
.600	1.550	.41620	.10430	.07890	.42190	-.12760	208.10000	.13941	.03889	.06546	3.99183
.602	1.585	.62470	.14150	.05780	.63790	-.14180	208.10000	.10208	.03762	.10421	4.41492
.598	9.579	.73350	.16970	.04530	.75150	-.14380	208.10000	.00811	.03719	.13305	4.32164
.597	12.610	.87600	.23720	.04030	.90670	-.14620	208.10000	.00153	.03677	.19944	3.69208
.599	15.670	.98190	.33120	.03380	1.03500	-.14400	208.10000	.01087	.04293	.29082	2.96388
.597	18.700	1.13700	.44730	.05910	1.22100	-.15970	208.10000	.00883	.05077	.39936	2.54241
.602	21.700	1.27000	.54510	.08010	1.32300	-.14150	208.10000	.00633	.05377	.49506	2.21465
.596	24.660	1.22900	.62430	.05470	1.37700	-.09230	208.10000	-.01197	.06867	.56184	1.96814
.603	28.510	1.10000	.67500	.06810	1.28900	-.00750	208.10000	-.02301	.09111	.59583	1.67987
GRADIENT		.04917	.00466	-.02222	.05076	-.00102	.00000	-.00074	-.00048	.00513	.15935

RUN NO. 303/ 0 RN/L = 2.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CCF	L/D
.798	-1.610	.18660	.09180	.09370	.18560	-.11810	310.70000	.05217	.04157	.05015	2.03434
.798	.074	.22140	.09400	.09370	.22160	-.12020	310.70000	.05216	.04154	.05245	2.35692
.796	1.089	.27550	.09810	.09280	.27730	-.12380	310.70000	.05163	.04212	.05554	2.60355
.797	1.592	.30770	.10110	.09250	.31040	-.12590	310.70000	.05003	.04247	.05863	3.04339
.802	3.545	.41640	.11380	.08780	.42260	-.13560	310.70000	.04842	.03938	.07446	3.65813
.798	7.589	.64120	.16510	.07900	.65740	-.15540	310.70000	.03947	.03953	.12594	3.88309
.799	9.575	.71080	.20290	.08180	.73460	-.15210	310.70000	.04150	.04030	.16312	3.50382
.805	12.600	.84030	.27550	.08560	.88020	-.15310	310.70000	.04184	.04376	.23284	3.04966
.801	15.690	.97060	.37090	.09530	1.02500	-.16570	310.70000	.04603	.04927	.32352	2.61726
.801	18.690	1.07100	.46470	.09710	1.16300	-.15800	310.70000	.04245	.05465	.41269	2.30395
.800	21.670	1.11500	.55320	.10240	1.24000	-.12700	310.70000	.03158	.07082	.48723	2.01530
.800	24.670	1.07000	.61070	.10840	1.22700	-.04590	310.70000	.01630	.09210	.52695	1.75186
.800	28.610	1.09700	.71210	.09490	1.30400	-.01630	310.70000	.00710	.09280	.63765	1.54140
GRADIENT		.05562	.00535	-.00144	.05734	-.00422	.00000	-.00097	-.00048	.00585	.159160

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C F M V LOW RN/L

(REJ009) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAP = 16.300  
 SFCBRK = 25.000 RUDDER = .000  
 ELEV-L = 17.000 ELEV-R = 15.000

RUN NO. 302/ 0 RN/L = 2.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMWD	Q	CAF	CAB	COF	L/D
.904	-1.626	.16330	.10310	.10500	.16820	-.11620	358.50000	.06141	.04359	.05957	1.64156
.903	.046	.20500	.10500	.10480	.20510	-.12130	358.50000	.06102	.04378	.06119	1.95316
.901	1.071	.27080	.11030	.10520	.27280	-.12980	358.50000	.06231	.04289	.06739	2.45543
.901	1.590	.30300	.11350	.10500	.30600	-.13360	358.50000	.06131	.04369	.06978	2.67050
.896	3.527	.43110	.13100	.10420	.43830	-.15050	358.50000	.06099	.04321	.08783	3.29138
.894	7.579	.63740	.18830	.10250	.65670	-.17070	358.50000	.05912	.04338	.14522	3.38672
.897	9.575	.71210	.22820	.10490	.73970	-.16760	358.50000	.06050	.04440	.18245	3.14734
.898	12.570	.84020	.30190	.11170	.88580	-.17740	358.50000	.06213	.04957	.25342	2.78415
.901	15.660	.96730	.39240	.11680	1.03700	-.18370	358.50000	.06289	.05391	.34047	2.46440
.900	18.680	1.07000	.49080	.12240	1.17100	-.17770	358.50000	.05941	.06299	.43133	2.17944
.901	21.680	1.12300	.58580	.12950	1.26700	-.15020	358.50000	.05277	.07573	.51451	1.91705
.901	24.660	1.09500	.69010	.13380	1.26700	-.07090	358.50000	.03516	.09864	.56059	1.68498
.901	28.610	1.15200	.76690	.12170	1.37800	-.04120	358.50000	.02618	.09552	.68283	1.50187
	GRADIENT	.06350	.06681	-.00017	.06550	-.00827	-.00000	-.00007	-.00000	.00691	.39870

RUN NO. 301/ 0 RN/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMWD	Q	CAF	CAB	COF	L/D
1.057	-1.644	.15120	.16950	.17120	.14930	-.11520	412.00000	.10606	.06514	.10438	.89206
1.056	.033	.18820	.17040	.17030	.18830	-.12250	412.00000	.10730	.06300	.10741	1.10440
1.057	1.070	.26290	.17650	.17460	.26610	-.13760	412.00000	.10750	.06410	.11245	1.48890
1.052	1.571	.29340	.17630	.16820	.29820	-.14340	412.00000	.10658	.06162	.11472	1.66453
1.048	3.514	.42410	.19270	.16630	.43510	-.17130	412.00000	.10516	.06114	.13163	2.20128
1.046	7.559	.66480	.25600	.16630	.69370	-.21140	412.00000	.10163	.06467	.19187	2.59712
1.049	9.537	.76810	.29800	.16680	.80680	-.22150	412.00000	.09869	.06791	.23100	2.57758
1.052	12.560	.90400	.37390	.16830	.96370	-.22620	412.00000	.09721	.07109	.30445	2.41825
1.049	15.620	1.03400	.47090	.17500	1.12300	-.22870	412.00000	.09539	.07961	.39424	2.19660
1.042	18.660	1.15900	.57820	.17690	1.28300	-.23010	412.00000	.09096	.08594	.49667	2.00477
1.052	21.680	1.25200	.68790	.17690	1.41700	-.22400	412.00000	.09016	.08674	.60725	1.81929
1.050	24.650	1.30300	.79000	.17460	1.51400	-.19440	412.00000	.08258	.09202	.70650	1.64934
1.050	28.610	1.29400	.89790	.16840	1.56600	-.12650	412.00000	.06732	.10108	.80897	1.44162
	GRADIENT	.06628	.00564	-.00019	.06938	-.01361	-.00000	-.00002	-.00087	.00653	.31815

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V LOW RN/L

(REJ009) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILRON = .0000 BDFLAP = 16.300  
 SPDBRK = .5.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 300/ 0 RN/L : 2.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF50	Q	CAP	CDF	L/D
1.202	-.659	.12660	.17090	.17200	.12470	-.10310	442.50000	.05882	.11174	.74268
1.199	.050	.16650	.17270	.17260	.16670	-.11230	442.50000	.05870	.11404	.96415
1.197	1.064	.22970	.17790	.17370	.23300	-.12650	442.50000	.05891	.11910	1.29467
1.127	1.565	.25510	.18120	.17420	.26000	-.13240	442.50000	.05964	.12162	1.40781
1.199	3.528	.36990	.19780	.17460	.38140	-.15710	442.50000	.05945	.13840	1.87081
1.192	7.557	.60070	.25380	.17260	.62880	-.19920	442.50000	.06134	.19298	2.13662
1.191	9.546	.70960	.29210	.17030	.74840	-.21330	442.50000	.06293	.23000	2.43034
1.193	12.570	.87320	.36770	.16960	.92940	-.22790	442.50000	.06647	.30203	2.13597
1.191	15.630	1.09100	.45990	.17310	1.08840	-.23370	442.50000	.07149	.39039	2.17718
1.189	18.640	1.11200	.55780	.17290	1.23000	-.23510	442.50000	.07386	.43762	1.93440
1.195	21.680	1.19800	.65820	.17210	1.34900	-.22320	442.50000	.07762	.58615	1.80774
1.194	24.650	1.25100	.76230	.17110	1.45500	-.20440	442.50000	.08797	.68679	1.64114
1.194	26.600	1.31200	.89090	.15670	1.58000	-.17770	442.50000	.09304	.82074	1.36791
	GRADIENT	.05820	.02762	.00464	.06140	-.01291	-.00000	.00044	.00642	.26880



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ010) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10.000 IN.  
 BREF = 20.1504 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = 16.300  
 SPOBRK = 25.000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 309/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.598	-.648	-.03990	.06750	.06710	-.04070	.00490	480.80000	.02827	.03883	.02873	-.59119
.599	-.078	-.06890	.06720	.06720	-.02880	.00350	480.80000	.02851	.03859	.02850	-.13234
.599	1.123	.04230	.06660	.06570	.04360	.00500	480.80000	.02731	.03839	.02816	.63575
.598	1.600	.06270	.06740	.06560	.06460	.00510	480.80000	.02719	.03841	.02898	.93121
.596	3.563	.15860	.07040	.06040	.16260	.00420	480.80000	.02195	.03845	.03201	2.25225
.597	7.594	.35700	.08750	.03950	.36540	-.00080	480.80000	.00239	.03711	.05066	4.08242
.599	9.576	.48100	.10430	.02620	.47190	-.00390	480.80000	-.01076	.03696	.06789	4.41800
.598	12.580	.72080	.15100	.01210	.63880	-.00890	480.80000	-.02522	.03732	.11452	4.11304
.598	15.660	.76270	.23000	.01560	.79650	-.01400	480.80000	-.02533	.04113	.19041	3.31592
.598	18.790	.89960	.32660	.02100	.95680	-.02240	480.80000	-.02377	.04477	.28425	2.75386
.597	21.710	1.03100	.43540	.02320	1.11920	-.02400	480.80000	-.03050	.05370	.38559	2.36759
.597	24.680	1.11020	.53290	.02100	1.23100	-.02540	480.80000	-.03969	.06769	.47794	2.08181
.597	28.620	1.03020	.59690	.03070	1.19020	.06980	480.80000	-.04921	.07991	.52681	1.72524
GRADIENT	.04732	.02670	.02670	-.00163	.04846	-.00022	.00000	-.00154	-.00009	.00000	.67859

RUN NO. 308/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.799	-.664	-.04930	.07160	.07100	-.05010	.01040	639.20000	.03151	.03949	.03219	-.68841
.799	-.069	-.01330	.07080	.07080	-.01320	.00950	639.20000	.03063	.04017	.03062	-.18769
.800	1.091	.03570	.07110	.07040	.04100	.00820	639.20000	.03091	.03949	.03169	.55716
.800	1.598	.06470	.07110	.06930	.06660	.00800	639.20000	.02976	.03954	.03161	.90878
.802	3.534	.16360	.07480	.06450	.16990	.00610	639.20000	.02688	.03762	.03730	2.21244
.798	7.575	.38400	.10360	.05210	.39430	-.00660	639.20000	.01149	.03761	.06634	3.70364
.799	9.568	.47610	.13400	.05300	.49180	-.01070	639.20000	.01346	.03934	.09522	3.55312
.799	12.590	.60540	.18990	.05340	.63220	-.01250	639.20000	.01350	.03990	.15098	3.18747
.797	15.650	.73670	.27010	.06150	.78160	-.02280	639.20000	.01611	.04539	.22635	2.72540
.798	18.710	.87620	.36490	.06470	.94670	-.02820	639.20000	.01217	.05253	.31521	2.40002
.796	21.720	.97640	.46020	.06660	1.07700	-.02820	639.20000	.00350	.06310	.40146	2.12140
.800	24.680	1.06100	.53620	.06940	1.13300	.02900	639.20000	-.00705	.07645	.46668	1.86615
.796	28.620	1.00300	.62380	.06770	1.17900	.06490	639.20000	-.01615	.08385	.55020	1.60742
GRADIENT	.05127	.02081	.02081	-.00157	.05248	-.00101	-.00000	-.00107	-.00050	.00134	.69304

ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REV 010) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 ALLCON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 307 / 0 RN/L = 3.70 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	COF	L/D
.895	-1.667	-1.04690	.08010	.07950	-.04780	.01320	607.00000	.3956	.03994	.04011	-.58552
.894	-.069	-.04830	.07940	.07940	-.00600	.01140	607.00000	.3956	.03984	.03955	-.10576
.893	1.083	.04960	.08010	.07910	.05110	.02800	607.00000	.03872	.04038	.03369	.01950
.894	1.593	.07730	.08110	.07890	.07950	.06550	607.00000	.03849	.04841	.04068	.95309
.893	3.540	.17840	.08950	.07830	.18360	.06320	607.00000	.03816	.04018	.04942	1.99375
.891	7.568	.36350	.12790	.07610	.39710	-.01140	607.00000	.03816	.03994	.04828	2.99371
.892	9.371	.46750	.15640	.07650	.48700	-.03340	607.00000	.03503	.04141	.11557	2.99394
.896	12.590	.59980	.21320	.07730	.63190	-.02300	607.00000	.03693	.04047	.17368	2.81360
.892	15.650	.73480	.29250	.08210	.79120	-.03740	607.00000	.03519	.04691	.24732	2.52904
.891	18.680	.87740	.38580	.08460	.95470	-.04300	607.00000	.02816	.05644	.33245	2.27332
.893	21.690	.97550	.48590	.09100	1.08600	-.03680	607.00000	.02144	.06956	.42129	2.07748
.893	24.670	1.07500	.56660	.09550	1.15020	.01300	607.00000	.01108	.08362	.49079	1.77000
.888	28.550	1.04920	.66780	.08540	1.24000	.04370	607.00000	.00225	.08315	.59460	1.57000
GRADIENT		.05377	.04230	-.00209	.05523	-.00247	.00000	-.00037	.00000	.00225	.61663

RUN NO. 306 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	COF	L/D
1.054	-.653	-.00171	.14500	.14460	-.03330	.01900	630.40000	.08368	.06092	.08403	-.21833
1.054	.058	.01320	.14540	.14540	.01340	.07380	630.40000	.08364	.06156	.08385	.00114
1.054	1.066	.08420	.14740	.14580	.00290	-.02400	630.40000	.08471	.06109	.08624	.54420
1.053	1.579	.11360	.14860	.14740	.11760	-.01140	630.40000	.08514	.05986	.08865	.76400
1.052	3.541	.23650	.16460	.14570	.24600	-.03490	630.40000	.08436	.06134	.08939	1.47066
1.053	7.557	.45770	.20520	.14320	.48070	-.06940	630.40000	.07903	.06417	.14157	2.21075
1.048	9.546	.55710	.23300	.13740	.58810	-.07520	630.40000	.07255	.06445	.16947	2.03000
1.051	12.600	.69950	.29560	.13640	.74710	-.04250	630.40000	.07075	.06530	.23197	2.36537
1.051	15.620	.85020	.38140	.13550	.92130	-.09530	630.40000	.06568	.07242	.31132	2.12329
1.052	18.670	.99700	.48320	.13460	1.09900	-.10960	630.40000	.05799	.08041	.40675	2.06328
1.050	21.670	1.11000	.59070	.13870	1.25100	-.11070	630.40000	.05164	.08786	.50919	1.88080
1.048	24.660	1.18200	.69430	.13790	1.36400	-.09470	630.40000	.04424	.09366	.60931	1.70281
1.048	28.620	1.21800	.81420	.13150	1.45900	-.05880	630.40000	.03389	.09761	.72861	1.49547
GRADIENT		.06412	.00376	.00021	.06676	-.01292	.00000	.00000	-.00001	.00381	.41422



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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B ( M F W V NOM. RN/L

(REJ010) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SJ.FT.  
 LREF = 14.2440 IN.  
 BREF = 24.1004 IN.  
 SCALE = .0000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEWIN = .0000  
 AIRLON = .0000 BDFLAP = 16.300  
 SPDRK = 25.0000 RIDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 3057 0 RN/L = 2.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	CAF	CAB	CDF	L/D
1.199	-1.664	-102480	.15260	.15240	-102260	.00820	.09507	.05733	.09532	-1.13647
1.201	-1.059	-102080	.15240	.15230	-102100	.00810	.09429	.05601	.09431	-1.13684
1.198	1.079	.08330	.15360	.15220	.08620	-101440	.09545	.05075	.09705	.54175
1.196	1.568	.11150	.15550	.15240	.11570	-102000	.09546	.07694	.09859	.71691
1.200	3.524	.22430	.16800	.15190	.23460	-104400	.09444	.05746	.10368	1.35407
1.198	7.572	.44440	.20760	.14720	.46790	-107840	.08761	.09559	.14850	2.14105
1.197	9.546	.54110	.23730	.14420	.57300	-108650	.08355	.06065	.17742	2.28113
1.198	12.570	.63270	.29920	.14140	.74050	-109750	.07751	.06389	.23681	2.31301
1.198	15.610	.83450	.37980	.14120	.91590	-111190	.07388	.07712	.31432	2.19743
1.192	18.630	.96320	.47290	.14030	1.06300	-12170	.06467	.07163	.40500	2.03507
1.200	21.870	1.05530	.56920	.13970	1.19340	-111910	.06233	.07737	.49734	1.85212
1.187	24.660	1.13400	.67080	.13670	1.31060	-10760	.05294	.06376	.59469	1.68974
1.195	28.600	1.22700	.81100	.12450	1.46600	-10560	.04023	.06427	.73708	1.51346
GRADIENT	.05880	.05328	.05328	-.00011	.06154	-.01242	-.00000	-.00006	.00337	.35666

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ011) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAF = -11.700  
 SDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 139/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
.598	-1.0870	.06410	.06290	-1.0950	.05380	475.70000	.02822	.03468	.02947	-1.69577	
.598	-.07030	.06270	.06290	-.07010	.05300	475.70000	.02921	.03369	.02899	-1.12175	
.598	-.02470	.06180	.06230	-.02340	.05340	475.70000	.02770	.03460	.02721	-1.39969	
.600	.00010	.06180	.06180	.00190	.05330	475.70000	.02725	.03455	.02729	.00091	
.600	.09400	.06250	.06360	.09780	.05350	475.70000	.02256	.03384	.02876	1.50316	
.598	.19120	.06650	.04720	.19680	.05300	475.70000	.01391	.03329	.03335	2.87518	
.598	.29560	.07620	.03580	.30310	.05010	475.70000	.00243	.03337	.04321	3.87476	
.598	.40310	.09070	.02140	.41260	.04620	475.70000	-.01154	.03294	.05820	4.44565	
.598	.57020	.13760	.01820	.58650	.04070	475.70000	-.02613	.03433	.10415	4.14267	
.599	.70790	.21240	.01120	.73900	.03630	475.70000	-.02683	.03803	.17578	3.33354	
.599	.85700	.30760	.01360	.91050	.02720	475.70000	-.02665	.04025	.26956	2.78368	
.598	.98100	.40560	.01430	1.06300	.02950	475.70000	-.03217	.04647	.36646	2.39519	
.598	1.04100	.49360	.00900	1.15200	.02900	475.70000	-.04483	.05333	.44492	2.10412	
.598	.93370	.54140	.02110	1.07900	.13950	475.70000	-.04704	.06814	.48180	1.72438	
GRADIENT	.04696	-.00033	-.00152	.04802	-.00001	.00000	-.00142	-.00010	-.00021	.74336	

RUN NO. 138/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
.797	-.11660	.06770	.06630	-1.1740	.06350	637.70000	.03197	.03433	.03333	-1.72366	
.805	-.07610	.06590	.06620	-.07580	.06340	637.70000	.03210	.03410	.03180	-1.15414	
.799	-.02360	.06490	.06540	-.02220	.06230	637.70000	.03099	.03441	.03050	-.36387	
.802	.00280	.06490	.06470	.00480	.06240	637.70000	.03056	.03414	.03070	.04324	
.801	.10460	.06640	.05950	.10870	.06100	637.70000	.02639	.03311	.03339	1.57494	
.800	.21170	.07370	.05220	.21800	.05720	637.70000	.02018	.03202	.04181	2.87172	
.799	.32280	.09120	.04670	.33220	.05030	637.70000	.01436	.03234	.05919	3.53838	
.803	.41450	.11990	.04780	.42890	.04800	637.70000	.01373	.03407	.08636	3.45660	
.803	.54030	.17520	.05110	.56570	.03800	637.70000	.01463	.03647	.13969	3.08289	
.800	.67190	.25220	.05880	.68260	.03700	637.70000	.01847	.04033	.21336	2.66479	
.796	.81590	.34180	.05860	.82600	.03700	637.70000	.01224	.04636	.29791	2.38723	
.796	.90270	.42400	.05510	.99580	.06090	637.70000	.00165	.05345	.37440	2.12925	
.797	.89610	.48460	.05840	1.01700	.12250	637.70000	-.01007	.06847	.42262	1.84890	
.800	.92200	.58780	.06420	1.09100	.14400	637.70000	-.01264	.06784	.52038	1.56862	
GRADIENT	.05073	-.00025	-.00157	.05184	-.00060	.00000	-.00131	-.00026	.00004	.75904	



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## TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C M F W V NOM. RN/L

(REJ011) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SFD8RK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 137/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	COF	L/D
.905	-.662	-.10780	.08000	.07870	-.10870	.06850	618.60000	.04359	.03511	.04485	-1.34812
.901	.205	-.06230	.07740	.07770	-.06200	.06520	618.60000	.04319	.03451	.04297	-.80380
.903	1.242	.00040	.07810	.07810	-.00210	.05970	618.60000	.04470	.03340	.04473	.00521
.901	1.754	.02870	.07710	.07710	.03110	.05870	618.60000	.04205	.03505	.04298	.36820
.903	3.702	.13530	.08550	.07660	.14030	.05300	618.60000	.04267	.03393	.05165	1.58178
.903	5.695	.23030	.09330	.07590	.23910	.05070	618.60000	.04373	.03217	.06724	2.32124
.900	7.745	.33740	.12110	.07450	.35070	.04230	618.60000	.04243	.03207	.08930	2.78704
.898	9.720	.42060	.14780	.07470	.43950	.04110	618.60000	.04089	.03381	.11451	2.84502
.902	12.750	.55820	.20580	.07760	.58980	.02810	618.60000	.03945	.03815	.16865	2.71130
.900	15.800	.69390	.28050	.08090	.74410	.01790	618.60000	.03774	.04316	.23892	2.47447
.900	18.880	.81830	.36760	.08300	.89320	.02550	618.60000	.03335	.04965	.32059	2.22625
.898	21.990	.89870	.45420	.08470	1.07030	.05240	618.60000	.02319	.06151	.39707	1.97821
.897	25.090	.89980	.51550	.08530	1.33400	.11830	618.60000	.01227	.07303	.44957	1.74568
.898	29.090	.97160	.63640	.08380	1.15820	.13090	618.60000	.00218	.08162	.56490	1.52647
GRADIENT	.05605	.00139	-.00245	.05745	-.00359	-.00024			-.00021	.00161	.67921

RUN NO. 136/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	COF	L/D
1.052	-.650	-.07140	.13700	.13700	-.07300	.05820	628.00000	.08265	.05435	.08347	-.51836
1.051	.178	-.02260	.13670	.13680	-.02220	.04990	628.00000	.08285	.05395	.08278	-.16546
1.052	1.177	.04370	.13880	.13790	.04650	.03840	628.00000	.08477	.05313	.08571	.31448
1.050	1.667	.07340	.14010	.13790	.07740	.03280	628.00000	.08444	.05346	.08665	.52362
1.051	3.585	.19600	.14970	.13720	.20500	.01230	628.00000	.08370	.05350	.09635	1.30898
1.050	5.549	.30770	.16600	.13550	.32230	-.00590	628.00000	.08012	.05538	.11091	1.85320
1.049	7.601	.41810	.18730	.13030	.43920	-.01730	628.00000	.07508	.05522	.13252	2.23288
1.052	9.577	.51220	.21710	.12890	.54120	-.02410	628.00000	.07327	.05563	.16229	2.35885
1.051	12.610	.65830	.27780	.12740	.70300	-.03160	628.00000	.06810	.05930	.21993	2.36943
1.048	15.690	.81690	.36130	.12710	.88330	-.04220	628.00000	.06361	.06349	.30011	2.25895
1.051	18.720	.96190	.45660	.12370	1.05890	-.05560	628.00000	.05527	.06843	.39190	2.10707
1.051	21.740	1.08200	.56170	.12090	1.21300	-.05990	628.00000	.04685	.07405	.49281	1.92657
1.049	24.820	1.13000	.65530	.12060	1.30000	-.07280	628.00000	.03987	.08073	.58189	1.72370
1.048	28.930	1.12800	.76020	.11950	1.35500	.03960	628.00000	.02810	.09140	.68006	1.48424
GRADIENT	.06340	.00296	.00011	.06590	-.01092	.00000			-.00020	.00318	.43373

ARC 11-747 0453A B C M F M V NOM. RN/L

(REJ011) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 ALLRON = .0000 BDFLAP = -11.700  
 SPBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 135/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	q	CAF	CAB	COF	L/D
1.202	-0.660	-0.5810	.14610	.14550	-0.05980	.04590	567.000000	.09455	.05095	.03523	-0.39759
1.202	.125	-0.01370	.14520	.14530	-0.01340	.03650	567.000000	.09374	.05156	.03371	-0.09142
1.203	1.122	.04350	.14630	.14540	.04640	.02350	567.000000	.09404	.05136	.09493	.29767
1.202	1.627	.07720	.14690	.14470	.08130	.01770	567.000000	.09319	.05151	.09546	.52507
1.203	3.540	.18720	.15550	.14360	.19650	-0.00330	567.000000	.09289	.05071	.10485	1.20455
1.204	5.511	.29250	.16930	.14050	.30740	-0.02160	567.000000	.09336	.05114	.11847	1.72688
1.198	7.563	.40490	.19230	.13740	.42670	-0.03510	567.000000	.09588	.05152	.14129	2.11487
1.199	9.537	.50290	.21910	.13280	.53230	-0.04160	567.000000	.07973	.05307	.16682	2.29437
1.202	12.580	.65330	.27770	.12870	.69810	-0.05120	567.000000	.07224	.05646	.22255	2.35293
1.200	15.610	.79900	.35760	.12940	.86580	-0.06490	567.000000	.06949	.05931	.29930	2.23445
1.201	18.650	.93010	.44870	.12770	1.02500	-0.07520	567.000000	.06536	.06434	.38782	2.07306
1.200	21.690	1.02500	.54870	.12360	1.15200	-0.06870	567.000000	.05556	.06404	.47738	1.85555
1.199	24.720	1.10400	.63950	.11910	1.27100	-0.05830	567.000000	.04768	.07142	.57483	1.72694
1.198	28.750	1.16800	.76360	.10780	1.39100	-0.03280	567.000000	.03193	.07587	.69705	1.52824
GRADIENT	.05863	.04231	-.00046	.06125	-.01175	.00000		-.00037	-.00009	.00240	.2337



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ012) (03 APR 74)

## REFERENCE DATA

SACF = 2.4210 SQ.FT. XMRP = 32.3500 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 134/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
.799	-4.934	-.06270	.06100	.06120	-.06260	.05170	478.10000	.02601	.03519	.02601	-1.02288
.802	-2.947	-.06650	.06150	.06160	-.06640	.05320	478.10000	.02759	.03401	.02759	-1.07792
.803	-.963	-.07160	.06240	.06260	-.07150	.05420	478.10000	.02851	.03409	.02851	-1.14217
.802	.027	-.07490	.06280	.06300	-.07480	.05410	478.10000	.02852	.03448	.02852	-1.16730
.803	1.056	-.07480	.06260	.06280	-.07460	.05400	478.10000	.02796	.03484	.02796	-1.18790
.800	3.107	-.07540	.06230	.06250	-.07530	.05230	478.10000	.02772	.03478	.02772	-1.20480
.800	5.164	-.07160	.06090	.06110	-.07140	.04950	478.10000	.02505	.03605	.02505	-1.16858
.801	6.894	-.07110	.06020	.06030	-.07100	.04860	478.10000	.02298	.03732	.02298	-1.17745
GRADIENT		-.00174	.00020	.00020	-.00173	.00012	-1.00000	.00020	-.00000	.00020	-.02429

RUN NO. 149/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
.799	-4.953	-.06580	.06450	.06470	-.06560	.06040	640.20000	.03040	.03430	.03040	-1.03391
.801	-2.958	-.06930	.06560	.06580	-.06910	.06220	640.20000	.03111	.03469	.03111	-1.05015
.803	-.971	-.07420	.06600	.06630	-.07390	.06330	640.20000	.03233	.03397	.03233	-1.11463
.802	.026	-.07670	.06600	.06630	-.07640	.06350	640.20000	.03178	.03452	.03178	-1.15234
.803	1.060	-.07720	.06530	.06560	-.07700	.06350	640.20000	.03238	.03322	.03238	-1.17378
.800	3.118	-.07790	.06520	.06550	-.07770	.06250	640.20000	.03137	.03413	.03137	-1.18626
.799	5.183	-.07590	.06420	.06440	-.07570	.05930	640.20000	.02966	.03474	.02966	-1.17547
.798	7.077	-.07230	.06440	.06460	-.07210	.05840	640.20000	.02753	.03707	.02753	-1.11610
GRADIENT		-.00163	.00027	.00028	-.00163	.00029	-1.00000	.00016	-.00008	.00016	-.02364

RUN NO. 148/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
.900	-4.948	-.05310	.07720	.07740	-.05290	.06090	612.40000	.04015	.03725	.04015	-.68346
.903	-2.964	-.05300	.07800	.07820	-.05280	.06140	612.40000	.04331	.03489	.04331	-.67519
.904	-.970	-.05810	.07820	.07840	-.05780	.06390	612.40000	.04376	.03464	.04376	-.73724
.902	.029	-.06230	.07750	.07770	-.06200	.06550	612.40000	.04332	.03438	.04332	-.73794
.901	1.056	-.06360	.07690	.07710	-.06330	.06530	612.40000	.04288	.03422	.04288	-.82101
.899	3.120	-.06420	.07590	.07610	-.06390	.06370	612.40000	.04063	.03547	.04063	-.83968
.903	5.183	-.06220	.07680	.07700	-.06200	.05960	612.40000	.04186	.03514	.04186	-.80519
.901	7.150	-.06470	.07750	.07760	-.06450	.05900	612.40000	.04006	.03754	.04006	-.83119
GRADIENT		-.00167	-.00018	-.00018	-.00166	.00051	-1.00000	.00004	-.00022	.00004	-.02323

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## TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C M F W V NOM. RN/L

(REJ012) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 143/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
1.051	-4.949	-.01330	.13930	.13930	-.01300	.04730	624.30000	.08131	.05799	.08131	-.09332
1.051	-2.959	-.01620	.13860	.13870	-.01580	.04890	624.30000	.08248	.05622	.08248	-.11391
1.056	-.971	-.01400	.13940	.13940	-.01360	.04750	624.30000	.08377	.05563	.08377	-.09756
1.055	.030	-.02140	.13810	.13810	-.02100	.05060	624.30000	.08342	.05468	.08342	-.15206
1.054	1.062	-.02170	.13860	.13870	-.02130	.05010	624.30000	.08363	.05507	.08363	-.15357
1.052	3.120	-.02380	.13800	.13810	-.02340	.04890	624.30000	.08380	.05430	.08380	-.1694
1.047	5.177	-.02310	.13650	.13660	-.02280	.04650	624.30000	.08068	.05592	.08068	-.16691
1.051	7.056	-.02370	.13860	.13870	-.02340	.04660	624.30000	.08023	.05847	.08023	-.18312
GRADIENT		-.00136	-.00214	-.00213	-.00135	.00025	.00000	.00031	-.00044	.00031	-.00368

RUN NO. 143/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
1.203	-4.944	-.00380	.14830	.14830	-.00350	.03440	571.60000	.09187	.05643	.09187	-.02360
1.204	-2.956	-.00560	.14700	.14700	-.00530	.03590	571.60000	.09337	.05363	.09337	-.03605
1.204	-.964	-.01040	.14570	.14570	-.01000	.03620	571.60000	.09445	.05125	.09445	-.06863
1.200	.023	-.01110	.14540	.14540	-.01080	.03660	571.60000	.09383	.05157	.09383	-.07428
1.200	1.060	-.01140	.14560	.14570	-.01110	.03680	571.60000	.09411	.05159	.09411	-.07618
1.200	3.115	-.01340	.14700	.14700	-.01310	.03590	571.60000	.09380	.05320	.09380	-.08912
1.203	5.179	-.01630	.14710	.14710	-.01600	.03630	571.60000	.09331	.05379	.09331	-.10877
1.200	6.907	-.01950	.14690	.14690	-.01920	.03710	571.60000	.09257	.05433	.09257	-.13070
GRADIENT		-.00126	-.00222	-.00221	-.00126	.00020	.00000	.00023	-.00044	.00023	-.00864



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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ013) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDELAF = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 153/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/C
.597	-5.018	.43540	.09410	.01550	.44520	.04890	474.60000	-.01776	.03326	.05982	4.70706
.798	-2.998	.43210	.09470	.01660	.44250	.04870	474.60000	-.01703	.03363	.05998	4.64448
.601	-.980	.42750	.09490	.01760	.43760	.04820	474.60000	-.01532	.03292	.06090	4.58520
.601	.027	.42550	.09450	.01760	.43550	.04830	474.60000	-.01421	.03181	.06163	4.58094
.601	1.040	.43070	.09520	.01730	.44080	.04760	474.60000	-.01503	.03233	.06174	4.61668
.600	3.061	.42980	.09540	.01770	.43990	.04610	474.60000	-.01597	.03367	.06066	4.58483
.600	5.080	.42610	.09480	.01780	.43620	.04510	474.60000	-.01740	.03520	.05861	4.57231
.799	7.105	.42780	.09460	.01740	.43780	.04160	474.60000	-.02054	.03794	.05580	4.59567
.799	9.123	.42650	.09490	.01790	.43650	.04120	474.60000	-.02268	.04058	.05347	4.56792
GRADIENT		-.00018	.00012	.00015	-.00015	-.00242	.00000	.00017	-.00002	.00014	-.00079

RUN NO. 150/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/C
.799	-5.035	.44700	.12780	.04600	.46270	.04530	639.70000	.01093	.03507	.09111	3.56299
.798	-3.009	.44460	.12840	.04700	.46140	.04660	639.70000	.01183	.03517	.09159	3.52714
.799	-.987	.43890	.12710	.04690	.45450	.04710	639.70000	.01355	.03335	.09227	3.51250
.802	.029	.43480	.12690	.04740	.45040	.04820	639.70000	.01483	.03257	.09281	3.48565
.799	1.049	.43970	.12760	.04720	.45540	.04860	639.70000	.01314	.03406	.09202	3.50651
.797	3.067	.43420	.12690	.04750	.44990	.04670	639.70000	.01288	.03462	.09181	3.48124
.799	5.101	.43310	.12670	.04760	.44870	.04530	639.70000	.01277	.03483	.09049	3.47470
.798	7.131	.43650	.12580	.04620	.45140	.04240	639.70000	.00965	.03655	.08788	3.52365
.797	9.158	.43850	.12540	.04540	.45380	.03910	639.70000	.00468	.04072	.08341	3.55450
GRADIENT		-.00150	-.00020	.00009	-.00151	.00009	.00000	.00014	-.00005	-.00013	-.00009

RUN NO. 147/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/C
.902	-5.034	.45150	.15800	.07530	.47240	.03790	613.50000	.03887	.03643	.12031	2.89490
.904	-3.009	.45390	.15950	.07630	.47500	.03570	613.50000	.03988	.03642	.12176	2.88367
.905	-.986	.44710	.15820	.07630	.46810	.03660	613.50000	.04128	.03502	.12194	2.86232
.905	.029	.44340	.15720	.07590	.46430	.03740	613.50000	.04056	.03534	.12057	2.85809
.903	1.044	.44990	.15900	.07650	.47100	.03680	613.50000	.04212	.03438	.12327	2.86751
.900	3.074	.44680	.15730	.07540	.46770	.03740	613.50000	.04051	.03489	.12111	2.87838
.899	5.108	.43940	.15500	.07450	.45993	.03910	613.50000	.03845	.03605	.11773	2.87137
.899	7.140	.43750	.15610	.07600	.45830	.03830	613.50000	.03578	.04022	.11482	2.87117
.901	9.164	.43740	.15430	.07430	.45790	.03490	613.50000	.03366	.04064	.11266	2.86893
GRADIENT		-.00091	-.00029	-.00012	-.00094	.00026	-.00000	.00013	-.00026	-.00003	-.00052

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RN/L

(REJ013) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 ALLRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 144/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.055	-5.026	.53500	.22980	.13210	.56780	-.02110	628.10000	.07061	-.06149	.16814	2.34481
1.055	-3.007	.53760	.22820	.13020	.56930	-.02310	628.10000	.07067	-.05933	.16845	2.36940
1.055	-.984	.53390	.22600	.12880	.56330	-.02510	628.10000	.07125	-.05695	.16892	2.37480
1.034	.027	.53400	.22630	.12900	.56540	-.02500	628.10000	.07304	-.05596	.17011	2.37282
1.036	1.047	.53780	.22730	.12910	.56930	-.02560	628.10000	.07364	-.05546	.17138	2.38160
1.034	3.069	.53720	.22680	.12900	.56870	-.02500	628.10000	.07210	-.05690	.16976	2.38120
1.031	5.097	.53340	.22750	.13040	.56900	-.02300	628.10000	.06922	-.06118	.16621	2.35630
1.031	7.123	.52960	.22890	.13240	.56150	-.02020	628.10000	.06877	-.06363	.16523	2.32957
1.035	9.150	.52800	.22840	.13230	.55980	-.01820	628.10000	.06891	-.06339	.16508	2.32231
	GRADIENT	.00013	-.00016	-.00016	.00011	-.00031	.00000	.00030	-.00046	.00032	.00208

RUN NO. 141/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.204	-5.028	.52640	.22940	.13430	.55830	-.04070	571.40000	.07756	-.05674	.17333	2.29703
1.200	-3.008	.52560	.22720	.13230	.55720	-.04020	571.40000	.07792	-.05438	.17349	2.31565
1.200	-.985	.52580	.22640	.13140	.55720	-.04280	571.40000	.07798	-.05342	.17356	2.32542
1.199	.023	.52680	.22660	.13140	.55820	-.04300	571.40000	.07826	-.05314	.17400	2.32798
1.199	1.042	.53100	.22780	.13190	.56250	-.04340	571.40000	.07830	-.05360	.17479	2.33354
1.198	3.067	.52710	.22800	.13280	.55870	-.04290	571.40000	.07863	-.05417	.17446	2.31410
1.197	5.089	.52180	.22850	.13410	.55450	-.04180	571.40000	.07761	-.05649	.17272	2.28942
1.202	7.121	.51540	.22790	.13490	.54710	-.04000	571.40000	.07678	-.05812	.17062	2.26180
1.201	9.146	.51130	.22600	.13380	.54280	-.03790	571.40000	.07515	-.05865	.16827	2.26220
	GRADIENT	.00048	.00019	.00010	.00043	-.00043	-.00000	.00012	-.00002	.00020	.00017

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ014) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SFDLRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 152/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
.599	-5.004	.91700	.34970	.00900	.98140	.02710	476.90000	-.03382	.04282	.30388	2.67101
.601	-2.993	.91770	.35470	.01330	.98380	.02650	476.90000	-.03121	.04451	.30715	2.63605
.599	-9.85	.92240	.35740	.01420	.98910	.02580	476.90000	-.02906	.04326	.31098	2.62941
.596	.024	.92210	.35760	.01450	.98890	.02570	476.90000	-.02880	.04330	.31117	2.62699
.598	1.041	.92190	.35640	.01340	.98830	.02570	476.90000	-.02885	.04225	.31091	2.63573
.598	3.070	.91930	.35360	.01170	.98490	.02540	476.90000	-.03087	.04257	.30785	2.64914
.599	5.090	.91490	.34730	.00750	.97860	.02610	476.90000	-.03555	.04305	.30129	2.68331
.601	7.116	.91070	.34410	.00620	.97350	.02550	476.90000	-.03894	.04514	.29636	2.69397
.599	9.142	.91750	.34350	.00340	.97960	.01310	476.90000	-.04470	.04810	.29304	2.71809
GRADIENT		.00021	-.00021	-.00028	.00012	-.00017	.00000	.00006	-.00034	.00010	.00026

RUN NO. 151/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
.798	-5.049	.85620	.37150	.04930	.93200	.04860	638.20000	.00473	.04457	.32321	2.35266
.800	-3.014	.85720	.37750	.05450	.93500	.04710	638.20000	.00681	.04769	.32618	2.31797
.797	-.977	.85870	.38040	.05660	.93750	.04640	638.20000	.00797	.04863	.32813	2.30480
.798	.035	.85570	.37910	.05650	.93420	.04630	638.20000	.00739	.04911	.32646	2.30413
.800	1.058	.85360	.37890	.05710	.93220	.04700	638.20000	.00869	.04841	.32700	2.29928
.799	3.096	.85200	.37680	.05570	.93000	.04680	638.20000	.00837	.04733	.32594	2.30783
.800	5.139	.85130	.37410	.05330	.92840	.04590	638.20000	.00781	.04569	.32487	2.32219
.799	7.182	.85050	.36980	.04990	.92610	.04330	638.20000	.00364	.04626	.32017	2.34626
.798	9.223	.84750	.36210	.04400	.92160	.04100	638.20000	-.00194	.04594	.31304	2.38632
GRADIENT		-.00102	-.00018	.00020	-.00100	-.00001	-.00000	.00027	-.00007	-.00009	-.00016

RUN NO. 146/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
.902	-5.056	.84130	.39430	.08030	.90560	.04310	613.50000	.02815	.05215	.34302	2.14859
.906	-3.011	.86260	.40940	.08350	.94930	.03670	613.50000	.03076	.05274	.35358	2.14189
.899	-.984	.86020	.40890	.08320	.94860	.03710	613.50000	.02950	.05370	.35216	2.14329
.900	.034	.85860	.40810	.08310	.94700	.03370	613.50000	.02840	.05470	.35058	2.14305
.904	1.058	.85640	.40840	.08410	.94510	.03340	613.50000	.02903	.05507	.35053	2.13622
.897	3.098	.84960	.40230	.08090	.93650	.03350	613.50000	.02912	.05178	.34767	2.15065
.902	5.143	.85160	.40230	.08020	.93850	.03650	613.50000	.02693	.05327	.34629	2.15586
.906	7.184	.85160	.39910	.07710	.93730	.04010	613.50000	.02611	.05099	.34511	2.17391
.902	9.230	.84560	.39130	.07210	.92900	.04270	613.50000	.02187	.05023	.33828	2.20062
GRADIENT		-.00180	-.00107	-.00034	-.00206	.00030	-.00000	-.00026	-.00008	-.00005	.00004

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RV/L

(REJ014) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRCRN = .000 BOFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 145/ 0 RV/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CCF	L/D
1.035	-5.039	1.0180	.50350	.12120	1.12900	-.05510	627.60000	.04994	.07126	.43307	2.03879
1.035	-3.012	1.018	.50720	.12430	1.13200	-.06000	627.60000	.05150	.07280	.43556	2.02635
1.033	-1.990	1.03600	.51120	.12210	1.14900	-.06570	627.60000	.05101	.07109	.44092	2.04434
1.032	.019	1.03000	.50920	.12250	1.14200	-.06250	627.60000	.05164	.07186	.43817	2.03922
1.032	1.049	1.02900	.50960	.12310	1.14200	-.06240	627.60000	.05170	.07140	.43917	2.03654
1.031	3.080	1.01900	.50690	.12400	1.13200	-.05850	627.60000	.05111	.07289	.43519	2.02768
1.049	5.121	1.01000	.50010	.12110	1.12000	-.05170	627.60000	.05083	.07027	.43083	2.03486
1.053	7.165	1.00200	.49480	.11950	1.11000	-.04750	627.60000	.05230	.06720	.42879	2.03723
1.051	9.196	.99180	.48870	.11700	1.09900	-.04420	627.60000	.05041	.06659	.42325	2.04334
GRADIENT		-.00035	-.00012	.00001	-.00035	.00000	.00000	-.00002	.00003	-.00014	-.00019

RUN NO. 142/ 0 RV/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CCF	L/D
1.202	-5.033	.97620	.48880	.12270	1.08500	-.07130	571.00000	.05752	.06518	.42514	2.00990
1.205	-3.015	.97940	.49320	.12570	1.08900	-.07560	571.00000	.05867	.06703	.42759	1.99832
1.204	-.988	.98410	.49500	.12560	1.09400	-.07550	571.00000	.05969	.06591	.43026	2.00137
1.202	.027	.98090	.49350	.12530	1.09100	-.07390	571.00000	.05958	.06572	.42913	2.00117
1.202	1.045	.98250	.49490	.12620	1.09300	-.07570	571.00000	.06006	.06614	.43026	1.99815
1.199	3.078	.98230	.49450	.12580	1.09300	-.07590	571.00000	.05866	.06714	.42895	1.99935
1.199	5.121	.97650	.48930	.12310	1.08500	-.07470	571.00000	.05930	.06380	.42682	2.00207
1.201	7.157	.96280	.47970	.11920	1.06900	-.06900	571.00000	.05790	.06110	.42003	2.01874
1.203	9.190	.95500	.47360	.11630	1.06000	-.06690	571.00000	.05688	.05942	.41599	2.00275
GRADIENT		.00035	.00019	.00004	.00034	-.00005	.00000	.00002	.00003	.00020	.00008



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V LOW RN/L

(REJ015) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA =  
 AIRLON =  
 SPDRK =  
 ELEV-L =

.000 ELEVON = .000  
 .000 BDFLAP = .000  
 25.000 RUDDER = .000  
 .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 324/ 0 RN/L = 1.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.797	-.529	-.09470	.06000	.05910	-.09520	.04160	208.70000	.02581	.03329	.02669	-1.57810
.803	-.089	-.06470	.05960	.05970	-.06460	.04170	208.70000	.02595	.03375	.02584	-1.08545
.804	1.102	-.01920	.05840	.05870	-.01810	.04170	208.70000	.02888	.02982	.02853	-3.2954
.797	1.612	.00320	.05790	.05780	.00480	.04300	208.70000	.02350	.03430	.02363	.05477
.805	3.559	.09580	.05940	.05300	.09930	.04350	208.70000	.02259	.03041	.02871	1.62234
.794	5.555	.19650	.06410	.04480	.20180	.04280	208.70000	.01142	.03338	.03090	3.06461
.801	7.601	.30220	.07290	.03260	.30700	.03890	208.70000	.00428	.02832	.04485	4.11388
.797	9.598	.41090	.08950	.01980	.42010	.03510	208.70000	-.01473	.03453	.05552	4.58778
.798	12.590	.55850	.14370	.02050	.57680	.02710	208.70000	-.01079	.03129	.11520	3.83207
.594	15.660	.70410	.22080	.02250	.73760	.02350	208.70000	-.01686	.03936	.18286	3.18959
.604	18.700	.84610	.31310	.02730	.90240	.01050	208.70000	-.01423	.04153	.27584	2.68421
.595	21.730	.98660	.41590	.02110	1.07000	.01370	208.70000	-.02734	.04844	.37075	2.37198
.601	24.680	1.04920	.50180	.01790	1.16300	.03850	208.70000	-.03522	.05312	.45360	2.09074
.599	28.490	.97210	.55550	.02450	1.11900	.11550	208.70000	.04794	.07244	.49164	1.75004
GRADIENT	.04639	-.02428	-.00159	.04736	.00051	.00000	.00000	-.02091	-.00067	.00043	.78012

RUN NO. 319/ 0 RN/L = 2.08 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.797	-.631	-.10350	.06330	.06220	-.10420	.04980	310.80000	.02956	.03264	.03070	-1.63406
.802	-.087	-.06800	.06190	.06200	-.06790	.04940	310.80000	.03178	.03022	.03168	-1.09851
.797	1.121	-.01260	.06160	.06180	-.01140	.04810	310.80000	.03082	.03098	.03059	-.20477
.797	1.637	.00060	.06110	.06080	.01030	.04940	310.80000	.02904	.03176	.02932	.14015
.802	3.591	.10760	.06310	.05620	.11130	.05000	310.80000	.02682	.02938	.03374	1.70568
.797	5.549	.21450	.07080	.04970	.22030	.04500	310.80000	.01806	.03164	.03928	3.03043
.800	7.624	.32410	.09010	.04630	.33320	.03850	310.80000	.01559	.03071	.05966	3.59737
.798	9.589	.41820	.11880	.04750	.43220	.03260	310.80000	.01550	.03200	.08728	3.51967
.801	12.620	.54710	.17720	.05340	.57260	.03040	310.80000	.01671	.03669	.14141	3.08723
.800	15.690	.68900	.25390	.05820	.73200	.01980	310.80000	.01772	.04048	.21501	2.71267
.796	18.720	.81920	.33960	.05880	.88490	.01790	310.80000	.01379	.04501	.29707	2.41164
.800	21.750	.91810	.42840	.05770	1.01100	.03240	310.80000	.00581	.05189	.38003	2.14290
.798	24.690	.93270	.49330	.05860	1.05300	.08450	310.80000	-.00635	.06495	.43407	1.89065
.797	28.610	.93800	.58420	.06370	1.10300	.12090	310.80000	-.01464	.07834	.51532	1.60561
GRADIENT	.04997	-.02000	-.00143	.05101	.00000	.00000	.00000	-.00089	-.00054	.00054	.79326

ARC 11-747 QMS3A B C M F W V LOW RN/L

(REJ015) 103 APR 74 1

## REFERENCE DATA

SEF = 2.4210 SQ.FT. YMEP = 32.3010 IN.  
 LREF = 14.2440 IN. YMEP = .0000 IN.  
 BREF = 28.1004 IN. YMEP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEWIN = .0000  
 AIRLN = .0000 BDFLAF = .0000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 318/0 RN/L = 2.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CD	L/D
.899	-.637	-.09960	.07320	.07210	-.10040	.05450	355.80000	-.4029	.03181	.4141	-1.36036
.900	-.683	-.05690	.07300	.07310	-.05680	.05460	355.80000	.03373	.03373	.03929	-.77935
.905	1.067	.00400	.07530	.07540	.00540	.04410	355.80000	.04281	.03239	.04291	.05276
.905	1.566	.03140	.07590	.07500	.03350	.04310	355.80000	.04171	.03329	.04262	.41286
.905	2.553	.12380	.08330	.07510	.13470	.04340	355.80000	.04296	.03014	.05123	1.55801
.905	5.557	.22330	.09440	.07240	.23140	.04050	355.80000	.04211	.03040	.06421	2.76377
.899	7.616	.32620	.11720	.07300	.33880	.03180	355.80000	.03910	.03390	.08360	2.74240
.904	9.566	.41820	.14560	.07410	.43640	.02760	355.80000	.04052	.03358	.11248	2.87115
.898	12.610	.55190	.20150	.07620	.58250	.01580	355.80000	.03775	.03841	.16405	2.73813
.898	15.680	.70330	.27930	.07680	.75280	.00380	355.80000	.03472	.04406	.23682	2.51835
.917	18.670	.83440	.36890	.08230	.90480	.00100	355.80000	.03172	.05058	.32091	2.46242
.898	20.730	.88440	.41360	.07940	.97560	.01480	355.80000	.02555	.05310	.38923	2.10761
.901	24.700	.92800	.52320	.08760	1.06200	.06190	355.80000	.00982	.07778	.45269	1.77161
.900	28.620	.99040	.63440	.08250	1.17300	.03350	355.80000	-.00618	.06268	.56170	1.56107
GRADIENT	.55479	.00250	.00250	.00472	.05615	-.00266	.00000	.00077	-.00026	.00257	.69739

RUN NO. 313/0 RN/L = 2.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CD	L/D
1.031	-.637	-.06780	.13460	.13300	-.06330	.05380	408.90000	.07347	.05443	.08023	-.50355
1.034	-.651	-.02760	.13240	.13240	-.02650	.04530	408.90000	.08248	.04992	.08246	-.20400
1.032	1.069	.03950	.13590	.13510	.04200	.03340	408.90000	.07338	.05572	.08015	.29054
1.038	1.584	.07750	.13830	.13610	.08130	.02570	408.90000	.08636	.04974	.08858	.56344
1.051	3.539	.19740	.14580	.13330	.20610	.00550	408.90000	.08035	.05295	.09292	1.35475
1.053	5.509	.31060	.16320	.13260	.32480	-.01330	408.90000	.08029	.05231	.11110	1.90336
1.053	7.574	.41910	.18640	.12350	.44020	-.02480	408.90000	.07569	.05311	.13305	2.24352
1.052	9.550	.51370	.21430	.12610	.54220	-.03100	408.90000	.07075	.05535	.15973	2.33732
1.052	11.550	.61870	.25490	.12590	.65720	-.04010	408.90000	.06791	.05799	.19813	2.42681
1.051	15.650	.81960	.35930	.12540	.88630	-.05490	408.90000	.06108	.06432	.29790	2.27772
1.051	18.680	.97380	.46230	.12420	1.07600	-.07660	408.90000	.05290	.07130	.39474	2.11890
1.049	21.700	1.09400	.56730	.12470	1.22300	-.07110	408.90000	.04482	.07918	.49385	1.92155
1.050	24.660	1.14200	.65860	.12190	1.31300	-.04450	408.90000	.03916	.08274	.56107	1.77455
1.045	28.610	1.14200	.76090	.12090	1.36700	-.01610	408.90000	.02726	.09364	.69000	1.50142
GRADIENT	.06401	.00302	.00302	.00011	.06646	-.01165	.00000	.00020	-.00010	.00000	.69739

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V LOM RM/L

(REJ015) (03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVOM = .0000  
 ALLRON = .0000 BDFLAP = .0000  
 SPBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 312 / 0 RM/L = 2.30 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF0	Q	CAF	CAB	CDF	L/D
1.193	-0.651	-0.5110	.14290	.14190	-0.55270	.03920	438.90000	.09094	.05096	.09153	-0.35800
1.197	.060	-0.50790	.14210	.14210	-0.50780	.02940	438.90000	.09131	.05079	.09151	-0.55394
1.201	1.068	.05380	.14290	.14190	.05650	.01550	438.90000	.09172	.05018	.09275	.37673
1.201	1.587	.08200	.14460	.14230	.08600	.00960	438.90000	.09189	.05041	.09424	.56716
1.201	3.519	.19510	.15360	.14130	.20410	-.01210	438.90000	.09087	.05043	.10323	1.27013
1.201	5.506	.30200	.16860	.13880	.21680	-.02930	438.90000	.08751	.05129	.11750	1.79181
1.201	7.573	.41030	.19170	.13600	.43200	-.04270	438.90000	.08441	.05159	.14061	2.13385
1.197	9.540	.51270	.21960	.13160	.54210	-.05090	438.90000	.07819	.05341	.16695	2.33485
1.196	12.570	.66550	.28010	.12860	.71050	-.06130	438.90000	.07222	.05638	.22511	2.37549
1.197	15.650	.80870	.36080	.12910	.87590	-.07560	438.90000	.06909	.06001	.30282	2.24240
1.194	18.680	.94030	.45400	.12890	1.03620	-.08550	438.90000	.06281	.06609	.39131	2.07115
1.195	21.670	1.03700	.54820	.12630	1.16700	-.08210	438.90000	.05586	.07044	.48284	1.89291
1.195	24.660	1.10920	.64300	.12160	1.27620	-.06890	438.90000	.04737	.07423	.57544	1.72483
1.194	28.570	1.18400	.77030	.11020	1.40800	-.05380	438.90000	.03268	.07752	.70205	1.53721
GRADIENT	.05894	.02274	-.02014	.06149	-.01228	.00000		-.00002	-.00013	.00289	.39002

ARC 11-747 OAS3A B C M F V NDM. RN/L

(REUSE16) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LEF = 14.2440 IN. YMRP = .0000 IN.  
 BREP = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEMN = .0000  
 AIRLON = .0000 BDFLAP = .0000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 323/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDP	L/D
.597	-1.590	.09210	.05930	.05930	-.03270	.04100	479.70000	.12501	.03329	.02596	-1.55429
.600	-1.591	.05960	.05990	.05990	-.05990	.04060	479.70000	.02702	.03190	.02691	-1.01204
.598	1.129	.05990	.05770	.05790	-.021870	.04060	479.70000	.02549	.03241	.02532	-.17147
.603	1.632	.01120	.05750	.05710	.01280	.04050	479.70000	.02460	.03241	.02504	.19456
.599	3.562	.01560	.05540	.05270	.01090	.04070	479.70000	.02497	.03172	.02775	1.74327
.599	5.544	.02210	.06380	.04460	.02740	.03920	479.70000	.01142	.03130	.03299	3.16710
.598	7.605	.03020	.07310	.03160	.03120	.03230	479.70000	.00140	.03004	.04243	4.20017
.598	9.595	.04110	.06630	.01640	.02110	.02360	479.70000	-.01272	.03112	.05764	4.56073
.599	12.600	.05760	.03250	.00350	.05180	.02360	479.70000	-.12609	.03239	.11190	4.11260
.599	15.680	.07140	.01650	.00670	.07450	.02340	479.70000	-.02691	.03701	.17419	3.41310
.590	18.700	.08620	.00350	.00120	.09430	.01420	479.70000	-.03121	.04311	.26260	2.82177
.598	21.700	.09710	.00490	.01420	1.05900	.01430	479.70000	-.03250	.04674	.36132	2.41800
.598	24.700	1.06200	.05960	.01030	1.17300	.03650	479.70000	-.04290	.05720	.45110	2.12461
.597	26.650	.97540	.55390	.01840	1.12200	.11660	479.70000	-.05389	.07239	.43066	1.76107
GRADIENT	.04738	-.00001	-.00001	-.00144	.04836	-.00005	.00000	-.00118	-.00026	.00028	.79920

RUN NO. 323/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDP	L/D
.601	-.664	-.01740	.06300	.06180	-.03120	.04320	641.10000	.03075	.03105	.03192	-1.55567
.798	.084	-.06570	.06180	.06190	-.06560	.04830	641.10000	.02967	.03223	.02957	-1.06289
.803	1.094	-.01320	.06110	.06140	-.01200	.04790	641.10000	.02987	.03153	.02963	-.021514
.803	1.632	.01270	.06090	.06060	.01440	.04770	641.10000	.02973	.03157	.02942	.01773
.795	3.579	.01230	.06240	.05530	.01600	.04600	641.10000	.02431	.03099	.03151	1.79310
.798	5.576	.02320	.07010	.04810	.02920	.04170	641.10000	.01616	.03204	.03823	3.11330
.799	7.635	.03160	.06700	.04230	.03920	.03540	641.10000	.01167	.03043	.05683	3.11715
.799	9.619	.02540	.11620	.04350	.03880	.03210	641.10000	.01114	.03246	.08421	3.06729
.799	12.600	.05360	.17090	.05660	.05750	.03180	641.10000	.11136	.03464	.13717	1.93384
.795	15.700	.09180	.25070	.05340	.07360	.02950	641.10000	.01059	.04152	.20395	2.76801
.801	18.760	.01910	.33720	.05660	.06400	.01970	641.10000	.01284	.04551	.29423	2.43310
.796	21.720	.01470	.42330	.05470	1.06600	.03550	641.10000	.00945	.05125	.29423	2.11610
.797	24.650	.02310	.48650	.05640	1.04200	.09720	641.10000	-.01090	.06664	.42617	1.82762
.799	26.640	.03150	.58260	.06100	1.10400	.11900	641.10000	-.01715	.07115	.51410	1.61267
GRADIENT	.05132	-.00011	-.00011	-.00156	.05138	-.00071	.00000	-.00145	-.00011	.00014	.79915





DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L

(REJ016) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XHRF = 32.3010 IN.  
 LREF = 14.2440 IN. YHRF = .0000 IN.  
 BREF = 28.1004 IN. ZHRF = 11.2500 IN.  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 ALLRON = .0000 BDFLAP = .0000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 317 / 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.900	-.666	-.09330	.07260	.07150	-.09610	.05330	611.6000	.03818	.03332	.03929	-1.31192
.900	-.076	-.05520	.07240	.07240	-.05510	.04990	611.60000	.03901	.03339	.03893	-.76314
.902	1.065	.00500	.07300	.07290	.04840	.04520	611.60000	.04062	.03228	.04073	.06874
.901	1.604	.03650	.07300	.07200	.03850	.04310	611.60000	.04023	.03177	.04129	.49924
.902	3.544	.14540	.08110	.07230	.14510	.03810	611.60000	.04037	.03193	.04927	1.72996
.901	5.531	.23760	.09490	.07060	.24560	.03680	611.60000	.03905	.03155	.06254	2.52374
.900	7.598	.34580	.11710	.07030	.35830	.02790	611.60000	.03839	.03151	.08543	2.95460
.899	9.564	.42750	.14430	.07130	.44560	.02730	611.60000	.03666	.03464	.11019	2.96207
.900	12.590	.56120	.20300	.07290	.59130	.01770	611.60000	.03578	.03712	.16381	2.80348
.903	15.670	.69860	.27640	.07750	.74730	.00400	611.60000	.03500	.04250	.23554	2.52690
.898	18.680	.82840	.36320	.07870	.90110	.00590	611.60000	.02781	.05089	.31495	2.28116
.899	21.720	.91090	.44950	.08350	1.01300	.02330	611.60000	.02024	.06026	.39369	2.02659
.901	24.720	.91540	.51460	.08460	1.04700	.08820	611.60000	.01061	.07399	.44748	1.77910
.902	28.620	.98200	.63330	.08070	1.17400	.10440	611.60000	-.00063	.08133	.56179	1.56653
GRADIENT		.05633	.00201	.00011	.05764	-.00362	.00000	.00051	-.00040	.00244	.72852

RUN NO. 314 / 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
1.047	-.655	-.06900	.13240	.13160	-.07050	.05180	623.90000	.07879	.05281	.07999	-.52109
1.052	.067	-.02340	.13370	.13370	-.02330	.04410	623.90000	.08064	.05306	.08061	-.17547
1.052	1.067	.04180	.13390	.13310	.04430	.03110	623.90000	.08180	.05130	.08262	.31227
1.049	1.588	.07570	.13420	.12900	.07940	.02430	623.90000	.08020	.05180	.08237	.56438
1.051	3.534	.19890	.14540	.13290	.20750	.00280	623.90000	.08092	.05198	.09355	1.36769
1.051	5.518	.31380	.16170	.13070	.32790	-.01640	623.90000	.07754	.05316	.10871	1.94161
1.052	7.570	.42480	.18670	.12840	.44560	-.02930	623.90000	.07604	.05236	.13408	2.28409
1.052	9.550	.52180	.21430	.12470	.55010	-.03560	623.90000	.07059	.05411	.16093	2.43483
1.051	12.590	.66730	.27670	.12460	.71160	-.04320	623.90000	.06573	.05887	.21925	2.41163
1.051	15.640	.82010	.35950	.12500	.88670	-.03460	623.90000	.06083	.06417	.29763	2.28193
1.048	18.680	.97210	.45060	.12300	1.06800	-.06870	623.90000	.05158	.07142	.39093	2.12033
1.049	21.690	1.08200	.56190	.12220	1.21300	-.06730	623.90000	.04468	.07752	.48983	1.92568
1.048	24.670	1.13800	.65550	.12050	1.30800	-.04110	623.90000	.03807	.08243	.58054	1.73670
1.049	28.620	1.14600	.76100	.11910	1.37000	-.01290	623.90000	.02774	.09136	.68058	1.50578
GRADIENT		.06407	.00299	.00010	.06648	-.01183	.00000	.00036	-.00026	.00328	.45192

ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ016) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEWON = .000  
 ALLRON = .000 BDFLAF = .000  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 311/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMCD	Q	CAF	CAB	CDF	L/D
1.203	-0.650	-0.04930	.14310	.14260	-.05100	.03870	570.70000	.05128	.05122	.09185	-3.4514
1.203	.051	-0.00810	.14240	.14240	-.00800	.02690	570.70000	.05119	.05121	.09119	-0.5707
1.203	1.072	.05260	.14310	.14210	.05530	.01380	570.70000	.05187	.05023	.09289	.36777
1.201	1.565	.08170	.14430	.14200	.08560	.00790	570.70000	.05160	.05140	.09391	.56617
1.200	3.537	.19600	.15340	.14100	.20510	-.01380	570.70000	.05040	.05060	.10288	1.27790
1.201	5.523	.30350	.16920	.13920	.31840	-.03100	570.70000	.06821	.05099	.11844	1.79390
1.197	7.571	.41100	.19140	.13560	.43270	-.04440	570.70000	.06346	.05214	.13974	2.14734
1.197	9.532	.51040	.21890	.13130	.53960	-.05180	570.70000	.07792	.05338	.16621	2.33229
1.196	12.530	.66360	.27890	.12760	.70840	-.06160	570.70000	.07143	.05617	.22412	2.37861
1.196	15.600	.80740	.35920	.12870	.87420	-.07510	570.70000	.06773	.06097	.30035	2.02468
1.197	18.670	.93570	.45130	.12800	1.03100	-.08470	570.70000	.06229	.06571	.38906	2.07348
1.196	21.670	1.03400	.54550	.12520	1.16200	-.08150	570.70000	.05415	.07105	.47941	1.89510
1.197	24.660	1.10600	.64110	.12140	1.27200	-.06820	570.70000	.04668	.07472	.57314	1.72427
1.195	28.600	1.18100	.76730	.10840	1.40400	-.05290	570.70000	.03088	.07752	.69920	1.53699
GRADIENT	.05862	.00254	-.00036	.06119	-.01188	.00000		-.00019	-.00018	.00274	.36802

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TABULATED SOURCE DATA - 0453A

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(REJ017) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 322/ 0 RN/L = 6.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-.592	-.09880	.05920	.05830	-.08940	.03990	781.20000	.02584	.03246	.02676	-1.49936
.597	.105	-.05760	.05850	.05860	-.05750	.03970	781.20000	.02613	.03247	.02603	-.98466
.597	1.147	-.00780	.05740	.05760	-.02670	.03920	781.20000	.02595	.03165	.02581	-.13666
.595	1.602	.01530	.05750	.05700	.01690	.03910	781.20000	.02436	.03264	.02463	.26632
.597	3.564	.10850	.05880	.05200	.11190	.03860	781.20000	.02010	.03190	.02702	1.84267
.596	5.538	.20410	.06360	.04360	.20930	.03750	781.20000	.01145	.03215	.03160	3.20361
.596	7.605	.30570	.07230	.03120	.31260	.03560	781.20000	.00035	.03085	.04172	4.22875
.597	9.587	.41210	.08750	.01770	.42090	.03400	781.20000	-.01390	.03160	.03640	4.70664
.596	12.600	.57840	.12680	-.00450	.59260	.03160	781.20000	-.03337	.03287	.03670	4.49154
.597	15.670	.73070	.20420	-.00070	.75870	.02260	781.20000	-.03670	.03630	.16958	3.57747
.598	18.720	.85330	.29190	.00260	.90180	.02290	781.20000	-.03963	.04223	.25189	2.92323
.595	21.710	.98470	.39880	.00630	1.06200	.01770	781.20000	-.04116	.04746	.35460	2.46890
.595	24.710	1.05200	.49780	.00700	1.16100	.03870	781.20000	-.04587	.05287	.44366	2.13910
.597	28.640	.97550	.54860	.01390	1.11940	.11680	781.20000	-.05817	.07207	.48529	1.77822
GRADIENT	.04765	-.00009	-.00009	-.00157	.04861	-.00032	.00000	-.00145	-.00012	.00006	.80864

RUN NO. 321/ 0 RN/L = 5.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.799	-.605	-.09850	.06250	.06150	-.09920	.04860	830.90000	.02930	.03220	.03035	-1.57558
.803	.097	-.06320	.06150	.06160	-.06510	.04840	830.90000	.03062	.03098	.03051	-1.06042
.804	1.088	-.01410	.06050	.06080	-.01290	.04720	830.90000	.02913	.03167	.02888	-.23210
.799	1.644	.01280	.06050	.06010	.01460	.04670	830.90000	.02865	.03145	.02905	.21274
.798	3.567	.11330	.06270	.05550	.11700	.04490	830.90000	.02352	.03198	.03076	1.80816
.799	5.564	.22190	.06980	.04800	.22760	.04110	830.90000	.01698	.03102	.03897	3.176 2
.796	7.602	.33580	.08630	.04110	.34430	.03520	830.90000	.00853	.03257	.03400	3.89211
.800	9.581	.43150	.11380	.04040	.44450	.03150	830.90000	.00859	.03181	.08245	3.79174
.799	12.620	.56270	.16980	.04270	.58620	.03190	830.90000	.00805	.03465	.13593	3.31505
.799	15.690	.70100	.24940	.05040	.74240	.02550	830.90000	.01018	.04022	.21057	2.81241
.793	18.700	.82820	.33600	.05270	.89220	.01950	830.90000	.00973	.04673	.29171	2.46512
.798	21.740	.91280	.42140	.05340	1.00400	.03720	830.90000	.00824	.05316	.37210	2.16373
.799	24.670	.92850	.48740	.05540	1.04700	.08890	830.90000	-.01001	.06541	.42791	1.90481
.798	28.690	.95088	.58410	.06140	1.10600	.11980	830.90000	-.01702	.07742	.51602	1.61184
GRADIENT	.05088	.00007	-.00007	-.00148	.05193	-.00093	.00001	-.00152	.00004	.00003	.81512

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = .000  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

ARC 11-747 QAS3A B C M F M V HIGH RN/L

(REJ017) (03 APR 74)

## REFERENCE DATA

SRC' = 2.4210 SJ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2300 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRLON = .0000 BOFLAP = .0000  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 316/ 0 RN/L = 4.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.901	-.675	-.05920	.07320	.07210	-.09610	.05320	783.10000	.03973	.03237	.04066	-1.30067
.896	.077	-.05540	.07160	.07170	-.05530	.05030	783.10000	.03842	.03324	.03634	-.77341
.901	1.093	.00420	.07220	.07210	-.00560	.04540	783.10000	.04189	.03121	.04099	.05850
.899	1.607	.03300	.07270	.07180	.03500	.04340	783.10000	.03959	.03221	.04056	.45321
.900	3.538	.14330	.07950	.07640	.14990	.03610	783.10000	.02911	.03129	.04429	1.82692
.900	5.527	.24300	.09340	.06960	.25080	.03330	783.10000	.03509	.03151	.05207	2.60107
.903	7.595	.34810	.11700	.07000	.36150	.02460	783.10000	.03624	.03176	.02555	2.97408
.900	9.575	.43320	.14440	.07040	.45120	.02590	783.10000	.03635	.03405	.11089	2.99855
.900	12.590	.56240	.19880	.07150	.59220	.02090	783.10000	.03369	.03781	.16196	2.82734
.900	15.640	.71090	.27730	.07530	.75330	.00400	783.10000	.03308	.04222	.23656	2.56440
.903	18.710	.83430	.36530	.07850	.90740	.00380	783.10000	.02822	.05028	.31780	2.28300
.901	21.730	.91210	.44910	.07950	1.01410	.02380	783.10000	.01786	.06164	.39201	2.03111
.900	24.720	.91230	.51300	.08440	1.04300	.02490	783.10000	.00854	.07546	.44392	1.77861
.903	28.670	.93540	.63550	.08110	1.17700	.01420	783.10000	-.00039	.06149	.56434	1.56235
GRADIENT	.05731	.03160	-.00037	.05861	-.00410	-.00410	.00000	-.00002	-.00035	.00196	.74811

RUN NO. 315/ 0 RN/L = 4.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.053	-.656	-.06730	.13400	.13320	-.06880	.05180	812.60000	.07912	.05408	.07990	-.50209
1.053	.073	-.02260	.13270	.13270	-.02240	.04320	812.60000	.08108	.05162	.08105	-.17018
1.048	1.083	.04470	.13300	.13210	.04720	.02950	812.60000	.08025	.05185	.08112	.33613
1.052	1.598	.08070	.13610	.13380	.08440	.02280	812.60000	.08188	.05192	.08420	.59247
1.054	3.548	.20220	.14770	.13430	.21100	.00070	812.60000	.08269	.05201	.09579	1.15932
1.050	5.526	.31730	.16320	.13190	.33150	-.01770	812.60000	.07855	.05355	.10991	1.94387
1.050	7.583	.43160	.18780	.12920	.45260	-.03330	812.60000	.07538	.05382	.13444	2.23820
1.050	9.563	.52770	.21440	.12380	.55600	-.03780	812.60000	.06879	.05501	.16021	2.45076
1.052	12.580	.66920	.27590	.12360	.71320	-.04240	812.60000	.06483	.05877	.21861	2.42475
1.050	15.640	.81880	.35800	.12400	.88500	-.05370	812.60000	.06119	.06381	.29656	2.28717
1.057	18.690	.96700	.45710	.12320	1.06300	-.06500	812.60000	.05038	.07222	.38833	2.11542
1.050	21.700	1.07700	.55880	.12100	1.20800	-.08140	812.60000	.04369	.07731	.48725	1.92755
1.053	24.690	1.13300	.65280	.11980	1.30200	-.03140	812.60000	.03842	.08138	.57876	1.73575
1.051	28.620	1.14500	.75960	.11840	1.36900	.01180	812.60000	.02759	.09341	.68122	1.50721
GRADIENT	.06447	.00343	.00048	.06691	-.01225	.00000	.00000	.00000	.00377	.00000	.44801



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TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V HIGH RN/L

(REJ017) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 ALLRON = .000 BDFLAP = .000  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 3107 0 RN/L = 4.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.196	-1.653	-0.04760	.14230	.14180	-.04920	.03700	814.80000	.09154	.05126	.09109	-1.33425
1.204	.051	-0.00870	.14220	.14220	-.02080	.02680	814.80000	.09123	.05097	.09122	-1.06166
1.201	1.082	.05330	.14280	.14180	.05590	.01400	814.80000	.09125	.05055	.09229	.37256
1.203	1.573	.08180	.14410	.14180	.08570	.06830	814.80000	.09126	.05054	.09358	.56749
1.202	3.519	.19430	.15330	.14110	.20340	-.01200	814.80000	.09009	.05101	.10240	1.26766
1.204	5.501	.30200	.16900	.13930	.31680	-.03130	814.80000	.08879	.05051	.11875	1.78661
1.199	7.568	.41500	.19210	.13570	.43670	-.04710	814.80000	.08410	.05160	.14088	2.16122
1.199	9.551	.51820	.21980	.13080	.54730	-.05510	814.80000	.07724	.05356	.16701	2.35730
1.198	12.550	.66470	.27760	.12650	.70910	-.06380	814.80000	.07539	.05611	.22279	2.39470
1.198	15.630	.80700	.35790	.12730	.87360	-.07280	814.80000	.06743	.05987	.30031	2.25443
1.196	18.680	.93780	.45130	.12720	1.03300	-.08230	814.80000	.06152	.06368	.38914	2.07786
1.197	21.670	1.03400	.54350	.12330	1.16100	-.08010	814.80000	.05317	.07013	.47812	1.90212
1.199	24.660	1.10300	.63820	.11990	1.26800	-.06530	814.80000	.04525	.07465	.57017	1.72775
1.198	28.580	1.17900	.76480	.10790	1.40100	-.05000	814.80000	.03120	.07670	.69762	1.54081
GRADIENT		.05819	.00267	-.00021	.06075	-.01165	.00000	-.00015	-.00006	.00275	.38561

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V LOW RN/L

(REJ018) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 339/ 0 RN/L = 1.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.597	-6.07	-4.1390	.10310	.09870	-4.1500	.19530	208.10000	.06391	.02879	.07431	-4.01517
.599	-1.05	-3.8640	.09680	.09950	-3.8620	.19550	208.10000	.06569	.02981	.06898	-3.91092
.603	1.136	-3.3330	.09290	.09950	-3.3140	.19400	208.10000	.07754	.02836	.06396	-3.58741
.603	1.635	-3.0910	.09040	.09920	-3.3640	.19390	208.10000	.06961	.02559	.06084	-3.41865
.603	3.591	-2.1200	.08180	.09500	-2.2650	.19140	208.10000	.06730	.02770	.05423	-2.58971
.599	5.556	-1.1910	.07640	.08750	-1.1110	.19020	208.10000	.06736	.02714	.04932	-1.55962
.597	7.628	-0.0230	.07470	.07710	-0.0150	.19300	208.10000	.06032	.02678	.04814	-1.31191
.597	9.602	.07970	.07760	.06330	.09150	.19060	208.10000	.03626	.02704	.05101	1.02554
.599	12.660	.24030	.10170	.04860	.25670	.19070	208.10000	.01752	.02308	.07335	2.06168
.599	15.710	.40240	.15930	.04490	.42860	.18360	208.10000	.01557	.02353	.11104	2.51411
.596	18.730	.53980	.22970	.04420	.58590	.18220	208.10000	.01287	.03133	.20004	2.35016
.596	21.750	.68400	.31660	.04160	.75270	.18510	208.10000	.00453	.03607	.28312	2.18148
.598	24.710	.76410	.40270	.03810	.88060	.20420	208.10000	-.00274	.04094	.36562	1.98834
.596	28.250	.73940	.44460	.04160	.86170	.25750	208.10000	-.01036	.05196	.39874	1.66337
GRADIENT		.04866	-.00506	-.00093	.05023	-.00109	.00000	-.00060	-.00032	-.00470	.04655

RUN NO. 334/ 0 RN/L = 2.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.800	-6.33	-3.9110	.11680	.11250	-3.9240	.20530	312.30000	.08093	.03157	.08526	-3.34789
.795	.090	-3.5440	.11160	.11220	-3.5420	.20330	312.30000	.07933	.03287	.07878	-3.17415
.803	1.135	-2.9910	.10620	.11210	-2.9690	.20090	312.30000	.07782	.03428	.07193	-2.81611
.810	1.686	-2.6560	.10390	.11170	-2.6250	.19810	312.30000	.07859	.03311	.07083	-2.55631
.814	3.597	-1.6270	.09680	.10680	-1.15630	.19290	312.30000	.07469	.03211	.06474	-1.64149
.805	5.596	-.05870	.09150	.09630	-.04950	.18780	312.30000	.06514	.03166	.06000	-.64140
.803	7.589	.05930	.09710	.08840	.07160	.17890	312.30000	.05563	.03277	.06459	.61081
.803	9.583	.18730	.11530	.08250	.20390	.16360	312.30000	.05018	.03232	.08342	1.62473
.802	12.620	.35160	.15920	.07890	.37790	.15520	312.30000	.04574	.03276	.12720	2.20910
.807	15.700	.51950	.22590	.07690	.56120	.13810	312.30000	.04355	.03335	.19378	2.29957
.803	18.740	.64700	.29750	.07380	.70830	.13720	312.30000	.03905	.03475	.26454	2.17532
.798	21.730	.75400	.37960	.07350	.84100	.15830	312.30000	.03383	.03967	.34279	1.98614
.801	24.750	.75560	.43610	.07980	.86870	.21410	312.30000	.02778	.05202	.38891	1.73215
.801	28.600	.74990	.50830	.08720	.90170	.24430	312.30000	.02311	.06409	.45193	1.47562
GRADIENT		.05426	-.00463	-.00131	.05607	-.00297	.00000	-.00137	-.00005	-.00468	.40017

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TABULATED SOURCE DATA - 0453A

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(REJ018) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 333/ 0 RN/L = 2.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	CAF	CAB	CDF	L/D
.904	-1.633	-1.3820	.13760	.13330	-1.38970	.22010	.09613	.03717	.10043	-2.82127
.904	.070	-1.34920	.13220	.13260	-1.34900	.21710	.09509	.03751	.09467	-2.64171
.904	1.112	-1.28930	.12690	.13250	-1.28680	.21230	.09446	.03804	.08888	-2.27972
.905	1.615	-1.25750	.12380	.13100	-1.25390	.20780	.09341	.03759	.08622	-2.08003
.910	3.596	-1.12840	.11940	.12720	-1.12070	.18950	.08958	.03762	.08183	-1.07590
.910	5.554	.00150	.12130	.12460	.01320	.16890	.08396	.03664	.08485	.01208
.916	7.637	.13780	.13280	.11330	.15430	.14650	.07748	.03582	.03730	1.03820
.922	9.579	.25360	.15370	.10930	.27560	.13200	.07184	.03746	.11670	1.65043
.921	12.640	.42680	.20470	.10570	.46110	.11230	.07026	.03544	.16946	2.09174
.922	15.690	.55780	.26820	.10740	.60950	.10810	.06590	.04150	.22828	2.07938
.922	18.700	.67200	.33960	.10620	.74550	.11390	.06244	.04376	.29816	1.97902
.897	21.760	.75020	.41100	.10370	.84910	.14290	.05306	.05164	.36405	1.82480
.897	24.740	.77270	.47630	.10920	.90110	.20680	.04763	.06157	.42037	1.62232
.900	28.640	.80870	.56680	.10990	.98150	.24010	.03741	.07249	.50327	1.42662
GRADIENT	.06157	-.00423	-.00144	.06373	-.00152	-.00729	-.00152	.00208	-.00430	.41654

RUN NO. 328/ 0 RN/L = 2.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	CAF	CAB	CDF	L/D
1.052	-.637	-.35540	.19640	.19240	-1.35760	.23060	.13153	.06087	.13549	-1.81013
1.055	.082	-.29910	.19230	.19280	-1.29880	.21670	.13256	.06024	.13213	-1.55464
1.060	1.103	-.22060	.18730	.19160	-1.21700	.19760	.13065	.06095	.12645	-1.17750
1.060	1.609	-.18430	.18710	.19220	-1.17920	.18950	.13220	.06000	.12713	-1.98518
1.060	3.549	-.05130	.18510	.18790	-1.03980	.16160	.12750	.06040	.12479	-1.27748
1.057	5.537	.07250	.19190	.18420	.09070	.13880	.12493	.05947	.13310	.37793
1.053	7.603	.19440	.20670	.17850	.21990	.12230	.11928	.05922	.14733	.94333
1.052	9.571	.30860	.22740	.17290	.34210	.10930	.11358	.05932	.16888	1.35719
1.051	12.610	.48050	.27870	.16700	.52980	.09220	.10540	.06160	.21852	1.72471
1.053	15.660	.63030	.34640	.16350	.70040	.08340	.09948	.06402	.28484	1.81902
1.051	18.700	.78530	.42940	.15900	.88150	.06800	.08640	.06860	.36446	1.82860
1.051	21.710	.91700	.52540	.14900	1.04600	.05890	.07445	.07455	.45609	1.74489
1.051	24.670	.98300	.61070	.14460	1.14800	.08100	.06639	.07821	.53949	1.60976
1.047	28.610	1.04220	.70670	.14130	1.21700	.12320	.05365	.08765	.62985	1.41588
GRADIENT	.07256	-.00261	-.00110	.07582	-.00101	-.01646	-.00090	-.00029	-.00250	.36707

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V LOW RN/L

(REJ018) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEV-N = -20.000  
 AIRRN = .000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 327/0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.203	-1.628	-25500	.18920	.18640	-25700	.17120	442.90000	.13158	.05482	.13439	-1.34741
1.205	.063	-21020	.18440	.18460	-21020	.15950	442.90000	.13004	.05456	.12380	-1.14014
1.215	1.091	-11470	.18060	.18340	-14390	.14540	442.90000	.12968	.05472	.12592	-1.81566
1.204	1.594	-11690	.17950	.18270	-11190	.13930	442.90000	.12793	.05477	.12477	-1.65141
1.204	3.537	-100420	.17890	.17880	.00620	.11890	442.90000	.12417	.05463	.12435	-1.02372
1.204	5.534	-10770	.18620	.17490	.12510	.09300	442.90000	.12342	.05446	.11193	.07830
1.202	7.566	-22150	.20230	.17130	.24620	.08350	442.90000	.11594	.05516	.14742	1.03453
1.196	9.579	33120	.22530	.16700	.36410	.07160	442.90000	.10369	.05711	.16695	1.47074
1.199	12.600	49910	.27580	.16330	.54720	.05750	442.90000	.10394	.05936	.21784	1.81347
1.201	15.650	66350	.34170	.15270	.72150	.03460	442.90000	.09266	.06004	.28065	1.91200
1.198	18.690	79110	.42270	.14700	.88490	.02320	442.90000	.06286	.06414	.36205	1.87015
1.190	21.690	89540	.50990	.14290	1.02020	.02740	442.90000	.07387	.05910	.44502	1.75567
1.193	24.650	98340	.59850	.13350	1.14300	.03370	442.90000	.06123	.07267	.53227	1.64267
1.192	26.640	105300	.71640	.12360	1.26800	.06000	442.90000	.04787	.07613	.64959	1.47015
GRADIENT		.06006	-.00232	-.00375	.06318	-.01241	.00000	-.00073	-.00002	-.00220	.01669





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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ019) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SA.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2800 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.000  
 AIRLON = .0000 BDFLAP = -11.700  
 SFDPRK = 25.000 RUDDER = .0000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 338/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	q	CAF	CAB	CDF	L/D
.599	-.681	-.40300	.10230	.09750	-.40420	.19430	481.40000	.06887	.02863	.07367	-3.93957
.598	.120	-.36680	.09690	.09760	-.36660	.19370	481.40000	.06887	.02873	.06810	-3.78791
.598	1.149	-.31730	.09120	.09750	-.31540	.19250	481.40000	.06863	.02887	.06229	-3.48076
.598	1.646	-.29580	.08910	.09760	-.29310	.19300	481.40000	.06860	.02900	.06015	-3.31815
.597	3.595	-.20270	.08090	.09350	-.19720	.19120	481.40000	.05331	.02819	.05282	-2.50367
.597	5.582	-.10860	.07560	.08580	-.10280	.19150	481.40000	.5822	.02758	.04814	-1.43763
.597	7.640	-.01430	.07370	.07490	-.02440	.19190	481.40000	.04696	.02794	.04596	-.19442
.599	9.624	.08470	.07650	.06130	.09630	.19120	481.40000	.03340	.02790	.04903	1.10661
.596	12.670	.24440	.09370	.09370	.25350	.19010	481.40000	.01133	.02837	.06797	2.55590
.596	15.730	.40380	.14810	.03300	.42890	.18990	481.40000	.00268	.03032	.11886	2.72824
.600	18.760	.54180	.21770	.03200	.58300	.19080	481.40000	.00107	.03093	.18851	2.48736
.596	21.770	.67520	.30210	.03010	.73910	.19220	481.40000	-.00380	.03390	.27059	2.23531
.598	24.730	.77650	.38800	.02760	.86760	.20810	481.40000	-.01188	.03948	.35217	2.00113
.598	28.710	.76180	.45400	.03230	.88630	.25350	481.40000	-.01838	.05068	.40364	1.67771
GRADIENT		.04689	-.00493	-.00292	.04845	-.00070	.00000	-.00282	-.00010	-.00481	.34033

RUN NO. 335/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	q	CAF	CAB	CDF	L/D
.600	-.701	-.39190	.11550	.11070	-.39330	.20490	641.30000	.07840	.03230	.08321	-3.39313
.602	.135	-.34880	.11020	.11100	-.34850	.20260	641.30000	.07867	.03233	.07785	-3.16532
.604	1.118	-.29780	.10450	.11030	-.29370	.19950	641.30000	.07783	.03247	.07204	-2.84946
.603	1.639	-.26780	.10120	.10880	-.26480	.19710	641.30000	.07694	.03186	.06933	-2.64676
.602	3.565	-.16860	.09340	.10370	-.16250	.19160	641.30000	.07251	.03119	.06226	-1.80360
.601	5.618	-.06320	.08910	.09460	-.05120	.18700	641.30000	.06351	.03109	.05819	-.67556
.798	7.593	.04770	.09110	.08400	.05940	.18270	641.30000	.05205	.03195	.05944	.52441
.602	9.587	.17820	.10950	.07830	.19400	.16710	641.30000	.04664	.03166	.07830	1.62761
.601	12.620	.34810	.15420	.07450	.37330	.15530	641.30000	.04258	.03192	.12311	2.25596
.600	15.690	.50990	.22060	.07450	.55060	.13800	641.30000	.04201	.03249	.18934	2.31134
.798	18.730	.63310	.29120	.07260	.69310	.14310	641.30000	.03589	.03671	.25655	2.17318
.798	21.750	.72690	.36940	.07370	.81210	.16520	641.30000	.03353	.04017	.33207	1.96808
.797	24.740	.74820	.43000	.07740	.85950	.21770	641.30000	.02760	.04980	.38277	1.74006
.604	28.760	.74870	.50900	.08600	.90130	.24430	641.30000	.02147	.06453	.45247	1.47087
GRADIENT		.05248	-.00518	-.00172	.05423	-.00317	-.00000	-.00144	-.00028	-.00489	.37482

ARC 11-747 0453A B C H F W V NOM. RN/L

(REJ019) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1084 IN.  
 SCALE = .03000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000  
 ELEVON = -20.000  
 AILRON = .000  
 BDFLAP = -11.700  
 SPDRK = 25.000  
 RDDR = .000  
 ELEV-L = -20.000  
 ELEV-R = -20.000

RUN NO. 332/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.903	-1.685	-1.39510	.13670	.13200	-.39170	.22040	617.90000	.09301	.03699	.09769	-2.85420
.902	.070	-.35120	.13030	.13070	-.35100	.21700	617.90000	.09307	.03763	.09265	-2.69559
.903	1.103	-.29280	.12410	.12970	-.29040	.21220	617.90000	.09252	.03718	.06691	-2.136000
.903	1.623	-.26350	.12130	.12870	-.26000	.20950	617.90000	.09227	.03643	.06487	-2.17252
.903	3.552	-.14200	.11480	.12340	-.13460	.19430	617.90000	.08675	.03665	.07824	-1.23656
.904	5.523	-.01280	.11620	.11690	-.00150	.17450	617.90000	.08103	.03587	.06051	-1.09366
.903	7.612	-.12590	.13030	.11210	.14500	.15190	617.90000	.07739	.03471	.03591	.98890
.903	9.583	.23600	.15380	.10910	.27600	.13210	617.90000	.07414	.03496	.11939	1.66363
.907	12.620	.42100	.19300	.10240	.45440	.11500	617.90000	.06579	.03361	.16348	2.11365
.902	15.670	.53630	.26810	.11780	.60810	.10460	617.90000	.06786	.03394	.22958	2.07575
.902	18.740	.67220	.33980	.10560	.74580	.11500	617.90000	.06287	.04293	.29914	1.97111
.899	21.730	.74820	.41350	.10720	.84810	.14270	617.90000	.05352	.05368	.36371	1.80006
.901	24.710	.76940	.47550	.11040	.89770	.20780	617.90000	.05180	.05860	.42232	1.61351
.899	28.660	.80130	.56070	.10770	.97200	.23830	617.90000	.03536	.07234	.49721	1.42907
GRADIENT		.05871	-.00507	-.00199	.06083	-.13614	.00000	-.00148	-.00061	-.00453	.38609

RUN NO. 329/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.049	-1.663	-.36320	.19430	.19000	-.36610	.23420	627.20000	.13006	.05992	.13431	-1.87350
1.049	.081	-.31680	.18820	.18860	-.31660	.22440	627.20000	.12937	.05923	.12893	-1.63407
1.049	1.113	-.23960	.18160	.18620	-.23600	.20760	627.20000	.12608	.06012	.12147	-1.31937
1.051	1.615	-.19710	.18090	.18630	-.19200	.19710	627.20000	.12759	.05871	.12213	-1.09043
1.053	3.554	-.05270	.18080	.18370	-.04140	.16280	627.20000	.12541	.05830	.12259	-1.09043
1.051	5.544	.06940	.18700	.17940	.08720	.14180	627.20000	.12100	.05840	.12885	-.29156
1.049	7.596	.19510	.20180	.17420	.22010	.12080	627.20000	.11658	.05762	.14465	.96717
1.048	9.570	.31320	.22270	.16760	.34530	.10600	627.20000	.10973	.05717	.16571	1.40801
1.050	12.590	.47310	.27560	.16440	.52790	.09090	627.20000	.10470	.05970	.21725	1.73391
1.048	15.660	.63280	.34350	.16000	.70200	.07980	627.20000	.09563	.06337	.28254	1.84161
1.049	18.710	.78130	.42860	.15530	.87750	.07010	627.20000	.08777	.06953	.36273	1.82304
1.048	21.710	.91810	.52430	.14760	1.04700	.05910	627.20000	.07284	.07476	.45497	1.75075
1.047	24.700	.97380	.60770	.14510	1.13900	.09020	627.20000	.06560	.07950	.53555	1.60283
1.047	28.630	.99530	.70260	.13990	1.21000	.13510	627.20000	.05395	.08855	.62712	1.41627
GRADIENT		.07454	-.00308	-.00148	.07774	-.05716	.00000	-.00012	-.00036	-.00269	.30106



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TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F W V NOM. RN/L

(REJ0519) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = .000 BDFLAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 326/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	q	CAF	CAB	COF	L/D
1.204	-636	-25310	.18030	.18520	-25520	.16940	574.20000	.13060	.05460	.13342	-1.34626
1.205	.070	-20920	.18390	.18420	-20900	.15940	574.20000	.12932	.05488	.12907	-1.13743
1.209	1.082	-14720	.17970	.18250	-14380	.14450	574.20000	.12803	.05447	.12529	-81902
1.210	1.587	-11150	.17840	.18150	-11120	.13790	574.20000	.12713	.05437	.12403	-64573
1.207	3.535	-00720	.17910	.17920	.00380	.11950	574.20000	.12527	.05393	.12526	-04052
1.205	5.529	.10740	.18550	.17430	.12480	.09900	574.20000	.12021	.05409	.13167	.57907
1.201	7.595	.22450	.20120	.16970	.24910	.08140	574.20000	.11460	.05510	.14652	1.11609
1.200	9.570	.33340	.22370	.16520	.36590	.06950	574.20000	.10896	.05624	.16828	1.48992
1.194	12.590	.49980	.27510	.15960	.54770	.05460	574.20000	.10262	.05898	.21759	1.81628
1.198	15.650	.65330	.34200	.15310	.72130	.03550	574.20000	.09200	.06110	.28317	1.91010
1.198	18.710	.79110	.42300	.14630	.88490	.02400	574.20000	.08293	.06397	.36240	1.87004
1.196	21.700	.89480	.50920	.14210	1.02000	.02670	574.20000	.07311	.06899	.44507	1.75810
1.195	24.660	.98490	.59850	.13300	1.14500	.03160	574.20000	.05905	.07395	.53139	1.64564
1.196	28.650	1.05400	.71640	.12340	1.26800	.03750	574.20000	.04711	.07629	.64929	1.47099
GRADIENT		.05900	-.00206	-.00146	.06214	-.01200	-.00000	-.00127	-.00020	-.00185	.31455

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V HIGH RN/L

(REJ20) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMGF = 32.3010 IN.  
 LREF = 14.2440 IN. YMGF = 10000 IN.  
 PRF = 28.1024 IN. ZMGF = 11.2500 IN.  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

BETA = 0.000  
 ELEWIN = -20.000  
 BDFLAP = -11.700  
 SPDRK = 25.000  
 ELEV-L = -20.000  
 ELEV-R = -20.000

RUN NO. 337/0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-1.763	-4.0740	.10170	.09630	-4.0870	.13470	781.80000	.06774	.02856	.07318	-4.00435
.598	-1.117	-3.6680	.09590	.09670	-3.6660	.19370	781.80000	.02794	.02770	.06719	-3.82277
.599	1.146	-3.3190	.09740	.09670	-3.3170	.19300	781.80000	.06772	.02770	.06136	-3.53083
.598	1.652	-2.9390	.09760	.09600	-2.9310	.19250	781.80000	.06615	.02770	.05972	-3.35700
.598	2.601	-2.0210	.07950	.09200	-1.9670	.19090	781.80000	.07443	.02757	.05194	-2.54316
.597	5.607	-1.0070	.07410	.08440	-1.0090	.19020	781.80000	.05527	.02613	.04614	-1.46170
.599	7.649	-0.0160	.07260	.07790	-0.0180	.18930	781.80000	.04590	.02758	.04527	-1.15033
.597	9.633	.06810	.07610	.06030	.06950	.18990	781.80000	.03211	.02819	.04231	1.13846
.595	12.640	.09400	.09410	.03910	.25480	.19190	781.80000	.01794	.02835	.06643	2.55063
.597	15.710	.40270	.13990	.02560	.42560	.19170	781.80000	-0.00308	.02466	.11228	2.67714
.597	18.760	.53990	.20750	.02280	.57800	.19240	781.80000	-0.00849	.03123	.17785	2.57123
.596	21.770	.66170	.29220	.02390	.72210	.19870	781.80000	-0.01135	.03525	.25727	2.29172
.597	24.760	.77640	.38240	.02200	.86520	.20760	781.80000	-0.01750	.03950	.34647	2.03079
.599	28.740	.76310	.45260	.03000	.86670	.25640	781.80000	-0.02106	.05116	.40769	1.62562
GRADIENT		.04711	-1.07504	-0.00101	.04864	-0.00085	.00000	-0.00074	-0.00027	-.00078	.01617

RUN NO. 336/0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.798	-1.739	-3.9510	.11560	.11050	-3.9650	.20480	829.90000	.07846	.03204	.06356	-3.41727
.799	.139	-3.4930	.10910	.11000	-3.4910	.20220	829.90000	.07839	.03161	.07754	-3.20780
.801	1.154	-2.9740	.10350	.10980	-2.9530	.19310	829.90000	.07766	.03184	.07170	-2.87300
.802	1.634	-2.7050	.10040	.10600	-2.6750	.19660	829.90000	.07612	.03187	.06847	-2.63588
.800	3.611	-1.6560	.09320	.10340	-1.5940	.19190	829.90000	.07145	.03195	.06127	-1.77763
.798	5.576	-0.6180	.08820	.09380	-0.5290	.18610	829.90000	.06278	.03102	.05735	-0.70014
.798	7.624	.04900	.09020	.08290	.06060	.18290	829.90000	.05231	.03059	.05989	.54392
.798	9.604	.17160	.10700	.07680	.18700	.17170	829.90000	.04576	.03104	.07631	1.60459
.801	12.610	.34320	.15050	.07190	.36780	.16140	829.90000	.04100	.03082	.12038	2.20114
.799	15.700	.50430	.21540	.07090	.54180	.14800	829.90000	.03762	.03302	.16302	2.34127
.800	18.750	.63640	.29160	.07180	.69630	.14540	829.90000	.03693	.03487	.25056	2.18245
.799	21.770	.72080	.36790	.07440	.80580	.17030	829.90000	.03357	.04083	.33003	1.55879
.799	24.770	.74550	.42920	.05680	.85680	.21950	829.90000	.02769	.04461	.36412	1.73728
.798	28.690	.74100	.50250	.08330	.89030	.24830	829.90000	.01916	.06414	.44421	1.48060
GRADIENT		.05279	-0.00509	-0.00166	.05454	-0.00302	.00000	-0.00167	.00001	-.00151	.00006



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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W Y HIGH RN/L

(REJ020) (03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SI.FT. YMEF = 32.3010 IN.  
 LREF = 14.2440 IN. YMEF = .0020 IN.  
 BREF = 20.1004 IN. ZMEF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.0000  
 AILRON = .0000 BOFLAP = -11.7000  
 SPDSKR = 25.0000 RUDDER = .0000  
 ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 331/0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
9.04	-1.709	-1.39190	.13680	.13190	-.39350	.22090	791.60000	.09483	.03707	.09969	-2.86517
9.06	-.091	-.34850	.13050	.13110	-.34820	.21730	791.60000	.09528	.03582	.09473	-2.66278
9.06	1.097	-.28950	.12360	.12350	-.28790	.21150	791.60000	.09335	.03535	.08844	-2.33817
9.06	1.621	-.25960	.12100	.12830	-.25670	.20880	791.60000	.09275	.03555	.08547	-2.14473
9.06	3.567	-.14250	.11490	.12360	-.13510	.19610	791.60000	.08785	.03575	.07927	-1.23986
9.05	5.529	-.01470	.11520	.11610	-.02350	.17500	791.60000	.08223	.03387	.08151	-.12792
9.03	7.619	-.12790	.12790	.10990	-.14370	.15070	791.60000	.07637	.03353	.09473	.99940
9.06	9.581	.25350	.15230	.10870	.27530	.13380	791.60000	.07364	.03436	.11843	1.66421
9.04	12.610	.42160	.20190	.10500	.45550	.11740	791.60000	.06854	.03646	.16632	2.08802
9.06	15.690	.55620	.26630	.10620	.60750	.10590	791.60000	.06742	.03858	.22920	2.08832
9.02	18.710	.67280	.33960	.10590	.74610	.11660	791.60000	.06225	.04365	.29429	1.90065
9.04	21.740	.75170	.41620	.10810	.85240	.14070	791.60000	.05325	.05485	.36518	1.80646
9.04	24.750	.76420	.47520	.11190	.89290	.20770	791.60000	.04920	.06270	.41825	1.60824
9.00	26.650	.80320	.56410	.10710	.90660	.23510	791.60000	.03617	.07093	.50190	1.43437
GRADIENT		.05849	-.00507	-.00198	.06058	-.00584	.00000	-.00173	-.00024	-.00480	.38361

RUN NO. 330/0 RN/L = 4.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
1.053	-.653	-.35820	.19510	.19100	-.36140	.23280	809.90000	.13072	.06128	.13482	-1.83670
1.052	.078	-.31220	.18820	.18860	-.31190	.22350	809.90000	.12971	.05889	.12929	-1.65886
1.052	1.108	-.23550	.18250	.18690	-.23180	.20540	809.90000	.12773	.05917	.12323	-1.29053
1.051	1.625	-.19810	.18030	.18590	-.19290	.19680	809.90000	.12730	.05860	.12178	-1.09836
1.050	3.556	-.05640	.17910	.18230	-.04520	.16390	809.90000	.12368	.05862	.12064	-.31494
1.051	5.549	.06960	.18440	.18070	.08750	.14210	809.90000	.12230	.05840	.13018	.30968
1.050	7.590	.19450	.20090	.17340	.21030	.12240	809.90000	.11556	.05784	.14351	.96828
1.050	9.573	.31360	.22350	.16770	.34650	.10580	809.90000	.10313	.05857	.16524	1.40718
1.049	12.590	.47820	.27460	.16370	.52660	.09210	809.90000	.10241	.06129	.21473	1.74197
1.050	15.660	.63420	.34320	.15920	.70330	.07920	809.90000	.09617	.06303	.28244	1.84233
1.052	18.720	.78430	.42770	.15350	.88000	.06690	809.90000	.08323	.06827	.36315	1.83301
1.052	21.720	.91360	.52210	.14690	1.04200	.06000	809.90000	.07278	.07412	.45323	1.75002
1.048	24.750	.97410	.60750	.14420	1.13900	.09150	809.90000	.06529	.07891	.53579	1.60373
1.048	26.680	.99920	.70610	.14010	1.21500	.13350	809.90000	.05395	.08615	.63043	1.41457
GRADIENT		.07222	-.00364	-.00199	.07539	-.01660	.00000	-.00168	-.00032	-.00329	.36660

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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V HIGH RN/L

(REJ020) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. ZMFP = 32.3010 IN.  
 LREF = 14.2440 IN. YMFP = .0000 IN.  
 BREF = 20.1904 IN. ZMFP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEWON = -20.0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SFD8RK = 25.0000 RUDDER = .0000  
 ELEW-L = -20.0000 ELEW-R = -20.0000

RUN NO. 325/ 0 RN/L = 4.26 GRADIENT INTERVAL = -5.00/ 5.00

WICH	ALPHA	CL	CD	CA	CN	CLMWD	W	CAF	CAB	CDF	L/C
1.200	-1.687	-26390	.18950	.18640	-26610	.17580	815.60070	.13122	.05518	.13430	-1.35279
1.203	.540	-22920	.18460	.18470	-22910	.16500	815.60000	.12952	.05510	.12937	-1.19335
1.205	1.001	-19340	.18020	.18290	-19500	.14830	815.60000	.12815	.05475	.12530	-1.05218
1.204	1.532	-12270	.17910	.18240	-11770	.14200	815.60130	.12742	.05498	.12411	-1.08537
1.206	3.544	-06920	.17690	.17920	.00190	.12400	815.60000	.12524	.05396	.12512	-1.05130
1.200	5.531	.10360	.16570	.17430	.12100	.10170	815.60000	.12096	.05394	.13236	.95763
1.199	7.363	.22560	.20100	.16950	.25010	.08111	815.60000	.11446	.05504	.14617	1.12210
1.198	9.584	.33590	.22310	.16410	.36840	.06920	815.60000	.11752	.05058	.16756	1.50548
1.198	12.593	.50080	.27380	.15810	.54640	.05180	815.60000	.09884	.05326	.21601	1.82867
1.200	15.650	.64990	.34150	.15350	.71790	.03680	815.60000	.09188	.06162	.28214	1.97317
1.198	18.870	.78730	.42110	.14630	.88070	.02620	815.60000	.08210	.06480	.35971	1.80411
1.191	21.600	.89320	.50670	.14080	1.01700	.02790	815.60000	.07005	.06935	.44154	1.76112
1.199	24.870	.98210	.59630	.13190	1.14190	.03170	815.60000	.05826	.07364	.52918	1.63011
1.196	28.620	1.05100	.71290	.12250	1.26420	.03700	815.60000	.04584	.07666	.64569	1.47102
GRADIENT		.06058	-0.0239	-0.00166	.06373	-0.01206	.00000	-0.01137	-0.00029	-0.00205	.3173

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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NDM, RN/L

(REJ021) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AILRON = 10.000 BDELAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

RUN NO. 124/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.600	-.697	-.25100	.08220	.07910	-.25200	.12100	480.90000	.04904	.03006	.03210	-3.05328
.598	-.378	-.20120	.07810	.07950	-.20070	.12100	480.90000	.04914	.03036	.04781	-2.57401
.600	1.345	-.15610	.07530	.07890	-.15430	.12110	480.90000	.04838	.03032	.04474	-2.07437
.601	1.841	-.13310	.07380	.07810	-.13070	.12010	480.90000	.04815	.02935	.04393	-1.80260
.599	3.794	-.04350	.07040	.07310	-.03880	.12040	480.90000	.04392	.02918	.04125	-.61888
.598	5.809	.05160	.07030	.06470	.05840	.12010	480.90000	.03519	.02951	.04092	.73353
.598	7.858	.15210	.07470	.05320	.16090	.11920	480.90000	.02360	.02980	.04538	2.03640
.599	9.840	.25490	.08380	.03900	.26550	.11760	480.90000	.00956	.02944	.05480	3.04213
.600	12.890	.41810	.11560	.01940	.43340	.11570	480.90000	-.01114	.03054	.06583	3.61741
.599	15.960	.56190	.18350	.02190	.59070	.11210	480.90000	-.01032	.03222	.15250	3.06254
.597	19.000	.70020	.26290	.02060	.74770	.11120	480.90000	-.01484	.03544	.22940	2.66354
.598	22.030	.83390	.35980	.02070	.90790	.11210	480.90000	-.01841	.03911	.32348	2.31795
.597	25.070	.91010	.44540	.01770	1.01300	.13550	480.90000	-.02861	.04631	.40332	2.04387
.597	28.960	.84590	.50020	.02800	.98230	.19720	480.90000	-.03132	.05932	.44823	1.69140
		.04622	-.00260	-.00138	.04749	-.00017	.00000	-.00116	-.00022	-.00237	.54538

RUN NO. 123/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.797	-.715	-.25300	.08870	.08560	-.25400	.13290	639.70000	.05473	.03087	.05789	-2.84938
.798	-.398	-.19590	.08440	.08570	-.19530	.12980	639.70000	.05423	.03147	.05287	-2.32255
.798	1.419	-.14560	.08090	.08450	-.14350	.12860	639.70000	.05303	.03147	.04946	-1.79866
.798	1.921	-.11990	.07920	.08320	-.11720	.12690	639.70000	.05202	.03118	.04806	-1.51371
.798	3.900	-.01850	.07740	.07850	-.01320	.12530	639.70000	.04788	.03062	.04687	-.23907
.793	5.981	.08260	.07600	.06970	.09120	.12280	639.70000	.03800	.03170	.04704	1.05101
.797	7.927	.19790	.09000	.06190	.20840	.11800	639.70000	.03190	.03000	.06033	2.19738
.797	9.909	.31200	.11460	.05900	.32790	.10590	639.70000	.02831	.03069	.08431	2.73126
.797	12.950	.45120	.16510	.05980	.47670	.10290	639.70000	.02728	.03252	.13341	2.73260
.799	16.000	.59140	.23720	.06520	.63290	.09310	639.70000	.02968	.03552	.20298	2.48987
.796	19.080	.71820	.31630	.06420	.78210	.09700	639.70000	.02413	.04007	.27846	2.27023
.797	22.160	.80590	.39820	.06490	.89650	.12470	639.70000	.01843	.04647	.35522	2.02330
.796	25.270	.80440	.45540	.06850	.92190	.18340	639.70000	.01093	.05757	.40343	1.76610
.797	29.290	.83260	.55280	.07490	.99660	.20210	639.70000	.00400	.07090	.49106	1.50580
		.05073	-.00246	-.00161	.05209	-.00162	.00000	-.00152	-.00009	-.00236	.50670

ARC 11-747 0453A B C H F WA V NDM. RN/L

(REJ021) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 ALLRON = 10.0000 BDFLAP = -11.700  
 SFDPRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = -20.000

RUN NO. 122/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.901	-1.705	-2.5690	.10660	.10340	-2.5820	.15130	615.50000	.07003	.03337	.07320	-2.41167
.902	.394	-1.9820	.10120	.10260	-1.9950	.14620	615.50000	.06845	.03415	.06711	-1.93770
.903	1.433	-1.3580	.09920	.10260	-1.3330	.14020	615.50000	.06886	.03374	.06550	-1.36872
.904	1.932	-1.1090	.09690	.10060	-1.1060	.13850	615.50000	.06701	.03359	.06340	-1.12748
.905	3.876	.00990	.09790	.09710	.01650	.12540	615.50000	.06430	.03280	.06527	.10101
.907	5.451	.11850	.10490	.09230	.12840	.11490	615.50000	.05966	.03264	.07244	1.12786
.908	7.887	.24210	.12400	.08960	.25690	.09640	615.50000	.05748	.03212	.09219	1.55246
.909	9.854	.34960	.15100	.08890	.37030	.08610	615.50000	.05561	.03329	.11817	2.31538
.910	12.860	.48710	.20170	.08830	.51980	.07660	615.50000	.05163	.03667	.16502	2.41711
.911	15.920	.62520	.27260	.09460	.67600	.06510	615.50000	.04923	.04137	.23276	2.29398
.912	19.000	.74240	.35220	.09130	.81660	.07310	615.50000	.04562	.04568	.30900	2.10784
.913	22.110	.81360	.43290	.09470	.91670	.10790	615.50000	.04161	.05309	.38359	1.88003
.914	25.220	.83130	.49910	.09730	.96470	.17020	615.50000	.03141	.05839	.43947	1.66564
.915	29.250	.89360	.61120	.09660	1.07800	.18670	615.50000	.02078	.07582	.54486	1.45217
.916		.95922	.80185	.100139	.05994	.00565	-5.00000	.00121	.00017	.00164	.55116

RUN NO. 121/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.050	-1.684	-2.1450	.16590	.16340	-2.1640	.14570	627.30000	.10511	.05829	.10769	-1.29198
1.052	.364	-1.4460	.16330	.16420	-1.4350	.13190	627.30000	.10671	.05749	.10580	-1.88421
1.051	1.403	-0.7210	.16030	.16200	-0.6820	.11560	627.30000	.10599	.05631	.10429	-1.49012
1.050	1.871	-0.4080	.15940	.16070	-0.3560	.10380	627.30000	.11425	.05641	.10307	-1.25505
1.051	3.704	.08370	.16620	.16040	.09450	.08590	627.30000	.10494	.05542	.11099	.50340
1.049	5.742	.20050	.17660	.15560	.21710	.06650	627.30000	.09374	.05586	.12096	1.17540
1.046	7.766	.31410	.19470	.15050	.33750	.05760	627.30000	.09437	.05613	.13911	1.61288
1.047	9.748	.42300	.22220	.14730	.45450	.04370	627.30000	.09336	.05694	.16601	1.93431
1.045	12.780	.53370	.27920	.14320	.63100	.02770	627.30000	.08346	.05974	.22097	2.09032
1.046	15.830	.73380	.35660	.14300	.80320	.01670	627.30000	.07880	.06420	.29492	2.05713
1.045	18.870	.87850	.44670	.13850	.97570	.00670	627.30000	.06857	.06993	.38045	1.96693
1.050	21.940	.99980	.54740	.13500	1.13200	.00350	627.30000	.06001	.07439	.47790	1.82647
1.048	24.970	1.05400	.63690	.13250	1.22400	.00346	627.30000	.05259	.07391	.56438	1.65456
1.048	29.050	1.06100	.73680	.12910	1.28500	.08510	627.30000	.03953	.08957	.68052	1.43950
1.048		.06691	.80004	.00065	.06974	.01354	-5.00000	.00020	.00065	.00065	.47351





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TABULATED SOURCE DATA - OAS3A

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AFC 11-747 OAS3A B C M F M V NOM, RN/L

(REUSE21) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA = .000 ELEVON = -10.000  
 AIRLON = 10.000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

RUN NO. 120/0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

## PARAMETRIC DATA

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/O
1.199	-1.677	-1.1090	.16800	.16610	-.16290	.11160	566.90000	.11347	.05263	.11537	-.94605
1.201	.263	-1.10400	.16400	.16450	-.10330	.09860	566.90000	.11262	.05188	.11214	-.63438
1.199	1.271	-.04330	.16250	.16340	-.03970	.08920	566.90000	.11131	.05209	.11041	-.26659
1.198	1.775	-.01170	.16260	.16280	-.02670	.07320	566.90000	.11083	.05137	.11057	-.07224
1.199	3.673	.09610	.16690	.16430	-.10460	.05730	566.90000	.10896	.05134	.11569	.58773
1.194	5.653	.21100	.17880	.15720	.22750	.03870	566.90000	.10532	.05188	.12722	1.17328
1.198	7.701	.32150	.19790	.15300	.34510	.02160	566.90000	.10239	.05261	.14573	1.62477
1.196	9.670	.42230	.22310	.14890	.43440	.01410	566.90000	.09401	.05429	.16901	1.89561
1.196	12.700	.58310	.27910	.14400	.63020	-.00430	566.90000	.08654	.05746	.22297	2.08987
1.196	15.730	.73010	.35360	.14240	.79860	-.01550	566.90000	.08100	.06140	.29447	2.06489
1.197	18.760	.86190	.43910	.13860	.99730	-.02540	566.90000	.07316	.06544	.37715	1.98277
1.196	21.810	.96110	.52970	.13400	1.08970	-.01980	566.90000	.06385	.07015	.46387	1.81712
1.157	24.810	1.04900	.62410	.12690	1.21400	-.01430	566.90000	.05438	.07212	.55877	1.68026
1.198	28.840	1.11300	.74320	.11420	1.33300	-.01090	566.90000	.03690	.07590	.67654	1.49736
	GRADIENT	.05925	-.00014	-.00130	.68212	-.01245	.00000	-.00105	-.00025	.00014	.35486

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(REJ022) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.0000  
 AILRON = 20.0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = -40.0000

RUN NO. 134/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
.597	-.726	-.31670	.11270	.10870	-.31810	.14040	475.90000	.07385	.03485	.07787	-2.80956
.601	.314	-.26990	.10760	.10910	-.26840	.13990	475.90000	.07410	.03492	.07271	-2.45932
.600	1.338	-.22180	.10280	.10790	-.21930	.13780	475.90000	.07388	.03492	.06874	-2.15825
.598	1.838	-.19780	.10070	.10700	-.19440	.13720	475.90000	.07235	.03465	.06608	-1.98338
.597	3.779	-.10470	.09570	.10240	-.09810	.13530	475.90000	.06692	.03548	.06030	-1.09324
.598	5.815	-.08850	.09350	.09390	.00100	.13420	475.90000	.06014	.03376	.05933	-.09109
.598	7.857	-.08780	.09480	.08190	.10000	.13380	475.90000	.04792	.03398	.06114	.92684
.600	9.842	.19350	.10160	.06700	.20800	.13260	475.90000	.03345	.03355	.06651	1.90500
.600	12.890	.35980	.12890	.04540	.37950	.12800	475.90000	.04075	.03465	.09514	2.79106
.597	15.950	.52050	.19370	.04320	.55370	.11830	475.90000	-.00558	.03762	.15733	2.68731
.596	19.010	.67100	.27160	.03830	.72290	.11590	475.90000	-.00230	.04060	.23330	2.46978
.600	22.020	.80730	.36440	.03510	.88500	.11240	475.90000	-.00476	.03946	.32740	2.21566
.596	25.020	.89500	.45020	.02940	1.00100	.12920	475.90000	-.01628	.04568	.40861	1.98808
.597	28.950	.85970	.50920	.02940	.99880	.18050	475.90000	-.03088	.06028	.45644	1.68848
GRADIENT	.04708	-.00378	-.00147	-.00147	.04886	-.00120	.00000	-.00159	.00012	-.00389	.38207

RUN NO. 133/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
.600	-.742	-.32390	.12400	.11980	-.32550	.15470	640.20000	.08212	.03768	.08633	-2.61212
.798	.412	-.26910	.11700	.11900	-.26830	.15250	640.20000	.08208	.03692	.08015	-2.19907
.798	1.436	-.21610	.11140	.11680	-.21320	.14980	640.20000	.08075	.03605	.07538	-1.93914
.799	1.926	-.19050	.10990	.11620	-.18670	.14830	640.20000	.08008	.03612	.07376	-1.73473
.798	3.887	-.08850	.10420	.11000	-.08120	.14370	640.20000	.07440	.03560	.06872	-.84889
.799	5.898	.01370	.10390	.10190	.02430	.14150	640.20000	.06594	.03596	.06809	.13191
.798	7.948	.11990	.10890	.09130	.13380	.13540	640.20000	.05576	.03554	.07372	1.10068
.797	9.935	.23990	.12820	.08490	.25840	.12770	640.20000	.04913	.03577	.09297	1.87099
.796	12.960	.33660	.17580	.08240	.42590	.11940	640.20000	.04468	.03772	.13976	2.25558
.796	16.010	.55530	.24510	.08240	.60140	.10630	640.20000	.04229	.04011	.20652	2.26601
.798	19.070	.76200	.32530	.07810	.76980	.10140	640.20000	.03563	.04247	.28514	2.15795
.797	22.140	.81690	.40630	.06850	.90980	.11250	640.20000	.02263	.04587	.36384	2.01045
.796	25.240	.81760	.46380	.07090	.93730	.16850	640.20000	.00993	.06097	.40066	1.76277
.798	29.190	.84550	.55670	.07370	1.01000	.18400	640.20000	.00106	.07184	.49421	1.51866
GRADIENT	.05105	-.00425	-.00215	-.00215	.05237	-.00242	.00000	-.00176	-.00045	-.00378	.38424

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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REJ022) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEWON = -20.000  
 AIRLON = 20.000 BDLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -40.000

RUN NO. 132/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.901	-746	-31690	.14380	.13970	-31880	.16490	615.00000	.09728	.04242	.10142	-2.20353
.902	.413	-25170	.13690	.13870	-25070	.13850	615.00000	.09702	.04168	.09521	-1.83869
.901	1.425	-119860	.13140	.13630	-19530	.15370	615.00000	.09591	.04039	.09103	-1.51163
.901	1.923	-16920	.13040	.13600	-16480	.15110	615.00000	.09621	.03979	.09163	-1.29816
.902	3.880	-55950	.12680	.13050	-95070	.14190	615.00000	.08977	.04073	.08613	-1.46868
.903	5.876	-34700	.13100	.12550	-66510	.13440	615.00000	.08524	.04026	.09095	.35831
.901	7.887	.17340	.14360	.11860	.19150	.11660	615.00000	.07703	.04147	.10258	1.20724
.900	9.861	.29000	.16520	.11310	.31400	.10220	615.00000	.07085	.04225	.12358	1.75535
.897	12.870	.44610	.21560	.11090	.48290	.08990	615.00000	.06843	.04270	.17427	2.06824
.901	15.930	.60580	.28470	.10750	.66070	.07200	615.00000	.06316	.04434	.24207	2.12787
.902	19.000	.74160	.36180	.09970	.81870	.07330	615.00000	.05282	.04688	.31648	2.05547
.899	22.070	.82630	.43660	.09400	.92980	.09560	615.00000	.03760	.05640	.38421	1.89324
.899	25.200	.83090	.49880	.09750	.96420	.16070	615.00000	.02768	.06967	.43572	1.66598
.898	29.170	.91220	.60910	.09220	1.08500	.17070	615.00000	.01368	.07852	.54078	1.48105
GRADIENT	.05554	-.00364	-.00202	.05784	-.00495	-.00495	-.00000	-.00160	-.00042	-.00321	.37585

RUN NO. 131/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.050	-701	-28670	.20780	.20420	-28920	.16370	627.00000	.14069	.06351	.14422	-1.38612
1.051	.391	-22170	.20100	.20250	-22030	.15400	627.00000	.13932	.06318	.13781	-1.10290
1.051	1.410	-16050	.19650	.19990	-15360	.14490	627.00000	.13773	.06217	.13386	-.81869
1.052	1.900	-12930	.19460	.19870	-12280	.14050	627.00000	.13733	.06137	.13319	-.66482
1.051	3.821	-.01170	.19420	.19460	.00130	.12310	627.00000	.13227	.06233	.13206	-.06008
1.049	5.785	.11260	.20330	.19100	.13250	.10370	627.00000	.12880	.06220	.14150	.55350
1.050	7.817	.23750	.21570	.18140	.26450	.08360	627.00000	.12135	.06005	.15620	1.10052
1.049	9.778	.35800	.23790	.17360	.39320	.06740	627.00000	.11297	.06063	.17811	1.50514
1.052	12.790	.52180	.29210	.16930	.57350	.05090	627.00000	.10618	.06312	.23051	1.78659
1.051	15.860	.68570	.36830	.16700	.76020	.03630	627.00000	.09940	.06760	.30337	1.86110
1.050	18.870	.84750	.44920	.15100	.94720	.01650	627.00000	.08263	.06837	.38454	1.88646
1.051	21.890	.96960	.54730	.14630	1.10400	.01400	627.00000	.07144	.07486	.47789	1.77191
1.053	24.960	1.02900	.63700	.14340	1.20100	.04050	627.00000	.06343	.07997	.56431	1.61479
1.051	29.050	1.04600	.73780	.13720	1.27200	.08850	627.00000	.04924	.08796	.66069	1.41726
GRADIENT	.06089	-.00298	-.00217	.06431	-.00898	-.00001	-.00001	-.00185	-.00033	-.00260	.29316

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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REJ022) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.000  
 ALLCON = 20.0000 BDFLAP = -11.700  
 SPDRK = 25.0000 RUDDER = .000  
 ELEV-L = .0000 ELEV-R = -40.000

RUN NO. 130/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFND	Q	CAF	CAB	CDF	L/O
1.203	-7.04	-22940	.19970	.19690	-23180	.13630	573.80000	.14086	.05604	.14370	-1.14836
1.201	.302	-16860	.19360	.19450	-16760	.12220	573.80000	.13867	.05583	.13778	-.87091
1.199	1.301	-10730	.18960	.19200	-10300	.10800	573.80000	.13608	.05592	.13371	-.56607
1.198	1.819	-.58290	.19400	.19650	-.07670	.10800	573.80000	.14005	.05645	.13754	-.42733
1.200	3.733	.03040	.19800	.19560	.04330	.08770	573.80000	.13834	.05726	.14086	.15390
1.198	5.694	.14450	.20480	.18940	.16410	.06700	573.80000	.13170	.05770	.14733	.70574
1.196	7.714	.26110	.21870	.18160	.28810	.04830	573.80000	.12377	.05783	.16132	1.19434
1.198	9.702	.37010	.23890	.17310	.40510	.03560	573.80000	.11500	.05810	.18163	1.54937
1.197	12.720	.53480	.29370	.16870	.58630	.19110	573.80000	.10721	.06179	.23338	1.82107
1.198	15.760	.69120	.36490	.16350	.76430	.04070	573.80000	.09388	.06412	.30323	1.89388
1.198	18.770	.83210	.44080	.14950	.92970	-.01360	573.80000	.08478	.06472	.37942	1.88826
1.196	21.820	.93310	.53020	.14540	1.06300	-.09000	573.80000	.07687	.06553	.46647	1.75569
1.198	24.830	1.02400	.62430	.13670	1.19100	-.09000	573.80000	.06495	.07175	.55908	1.63970
1.197	28.850	1.09020	.74430	.12580	1.31400	.02150	573.80000	.05003	.07577	.67785	1.46492
GRADIENT		.05833	-.00011	-.00010	.06178	-.01072	-.00000	-.00040	.00030	-.00040	.29415

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ023) (03 APR 74)

## REFERENCE DATA

SRFP = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVOM = -40.000  
 AILRON = .000 BDFAP = -11.700  
 SPD8RK = 25.000 RUDDER = .000  
 ELEV-L = -40.000 ELEV-R = -40.000

RUN NO. 129/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.596	-.048	-.48260	.15820	.15780	-.48270	.22760	475.40000	.11988	.03792	.12029	-3.05021
.598	.380	-.46400	.15490	.15800	-.46300	.22700	475.40000	.11978	.03822	.11671	-2.99514
.599	1.407	-.41320	.14710	.15720	-.40950	.22320	475.40000	.11881	.03839	.10872	-2.80927
.600	1.912	-.38430	.14330	.15600	-.37930	.22130	475.40000	.11725	.03875	.10453	-2.68253
.600	3.865	-.28880	.13200	.15120	-.27920	.21610	475.40000	.11296	.03824	.09389	-2.18695
.598	5.871	-.19540	.12380	.14310	-.18170	.21510	475.40000	.10462	.03848	.08548	-1.57869
.598	7.920	-.10410	.11830	.13150	-.08680	.21800	475.40000	.09347	.03803	.08062	-.88000
.598	9.924	-.00580	.11940	.11880	.01490	.21840	475.40000	.07900	.03960	.08039	-.04827
.600	12.970	.15650	.13420	.09370	.18260	.21320	475.40000	.05627	.03943	.09582	1.16553
.596	16.040	.33580	.17960	.07980	.37240	.20750	475.40000	.03831	.04149	.13972	1.87010
.599	19.080	.49240	.24400	.06970	.54510	.20490	475.40000	.03102	.03868	.20751	2.01743
.599	22.110	.65000	.32980	.06100	.72630	.19490	475.40000	.02122	.03978	.29303	1.97618
.597	25.090	.76540	.41880	.05470	.87080	.20140	475.40000	.01021	.04449	.37850	1.82772
.601	29.030	.77940	.48490	.04570	.81680	.22750	475.40000	-.00903	.05473	.43699	1.60759
GRADIENT	.04991	-.05671	-.05175	.05239	-.00304	.00000		-.00182	.00007	-.00676	.22328

RUN NO. 128/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.797	-.089	-.47750	.17630	.17550	-.47780	.23890	637.70000	.13114	.04436	.13188	-2.70947
.800	.539	-.44520	.17090	.17510	-.44380	.23640	637.70000	.13072	.04438	.12654	-2.61491
.798	1.559	-.39340	.16230	.17290	-.38890	.23210	637.70000	.12845	.04445	.11782	-2.42494
.799	2.050	-.36370	.15830	.17120	-.35980	.22970	637.70000	.12772	.04348	.11477	-2.31130
.799	3.991	-.26520	.14710	.16520	-.25430	.22170	637.70000	.12184	.04336	.10385	-1.80273
.799	6.022	-.16870	.13980	.15670	-.15310	.22180	637.70000	.11270	.04400	.09602	-1.20691
.799	8.056	-.07090	.13620	.14480	-.05120	.22390	637.70000	.10193	.04290	.09372	-.52121
.800	10.050	.05940	.14490	.13230	.08380	.21180	637.70000	.08862	.04368	.10189	.41014
.799	13.050	.25150	.18440	.12280	.28660	.19300	637.70000	.07778	.04502	.14049	1.36414
.797	16.100	.44770	.24640	.11250	.49850	.17110	637.70000	.06845	.04405	.20401	1.81769
.799	19.120	.61250	.31920	.10090	.68330	.15990	637.70000	.05800	.04290	.27861	1.91935
.799	22.160	.74230	.39850	.08850	.83760	.16190	637.70000	.04140	.04710	.35428	1.86566
.800	25.250	.76250	.45270	.08430	.88270	.20630	637.70000	.02635	.05735	.40037	1.68383
.800	29.270	.79930	.54250	.08240	.96250	.21780	637.70000	.01190	.07050	.48097	1.47349
GRADIENT	.05210	-.05717	-.05261	.05484	-.00424	.00000		-.00233	-.00028	-.00685	.22301

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## TABULATED SOURCE DATA - OA33A

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ARC 11-747 OA33A B C H F W V NOM. RN/L

(REJ023) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3510 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1504 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -40.000  
 AIRLON = .0000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDBR = .0000  
 ELEV-L = -40.000 ELEV-H = -40.000

RUN NO. 127/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF-D	Q	CdF	CAB	CdF	L/D
.901	-1.825	-4.9720	.20970	.20250	-50020	.24350	614.90000	.15224	.05026	.15943	-2.37142
.902	-1.505	-4.2610	.19610	.19390	-42430	.23500	614.90000	.14872	.05110	.14437	-2.17202
.904	1.510	-3.7220	.18970	.19340	-36710	.23030	614.90000	.14556	.05044	.13884	-1.96263
.902	2.016	-3.4490	.18560	.19770	-33810	.22750	614.90000	.14472	.04938	.13673	-1.85717
.895	3.939	-2.4080	.17120	.18730	-22840	.21740	614.90000	.13778	.04952	.12177	-1.47634
.901	5.974	-1.3810	.16510	.17660	-11200	.21730	614.90000	.11857	.04943	.11573	-1.36554
.901	7.996	-1.00970	.16830	.16830	.01380	.20060	614.90000	.11634	.04966	.11932	-1.07566
.911	9.940	.14010	.18510	.15810	.16990	.17710	614.90000	.11005	.04814	.13774	.75635
.897	12.950	.32400	.22780	.14940	.36680	.15660	614.90000	.03955	.04331	.17917	1.43225
.899	15.970	.52510	.28990	.13420	.58460	.12430	614.90000	.04523	.04457	.24272	1.81159
.901	19.020	.67310	.36010	.11910	.75940	.11690	614.90000	.07733	.04610	.31453	1.73572
.899	22.080	.77230	.42390	.10790	.87790	.13500	614.90000	.05139	.05061	.37762	1.73801
.900	25.200	.79910	.49280	.10560	.93280	.19350	614.90000	.03325	.05835	.43368	1.62174
.912	29.230	.85270	.59640	.10110	1.04100	.20880	614.90000	.02557	.07553	.53165	1.44111
GRADIENT	.05583	-1.0793	-1.0793	-1.0793	.05706	-1.05541	.00000	-1.00281	-1.00227	-1.00764	-2.446

RUN NO. 126/0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMF-D	Q	CdF	CAB	CdF	L/D
1.033	-1.810	-4.9030	.28130	.27430	-49490	.26460	629.10000	.20349	.07081	.21047	-1.74554
1.034	-1.550	-4.1330	.26650	.27040	-41470	.25220	629.10000	.20477	.06963	.19621	-1.55100
1.032	1.539	-3.5910	.25750	.26710	-35200	.24560	629.10000	.19760	.06950	.18804	-1.33044
1.030	2.044	-3.3160	.25300	.26460	-32140	.24250	629.10000	.19472	.06968	.18113	-1.13071
1.031	3.994	-2.2160	.24140	.25630	-22440	.23300	629.10000	.18627	.06943	.17216	-1.00047
1.031	5.965	-1.0630	.23950	.24820	-10790	.21870	629.10000	.18117	.06733	.17262	-1.20215
1.049	7.967	.05030	.24470	.23540	.06340	.19720	629.10000	.16661	.06679	.17659	.20571
1.047	9.929	.19540	.26070	.22310	.23740	.16800	629.10000	.15771	.06519	.19829	.74245
1.047	12.930	.38270	.30650	.21310	.44160	.14340	629.10000	.14402	.06314	.21922	1.24564
1.046	15.960	.55410	.37350	.20670	.63550	.12320	629.10000	.13521	.06151	.31473	1.82382
1.048	18.980	.73760	.44070	.17690	.84080	.09670	629.10000	.11697	.06393	.27461	1.67343
1.046	21.990	.86980	.53020	.16580	1.02500	.09130	629.10000	.09199	.07381	.46162	1.64197
1.047	25.030	.93900	.61600	.16190	1.11100	.09130	629.10000	.08154	.07922	.54407	1.52406
1.047	29.110	.97700	.71700	.15100	1.20200	.14500	629.10000	.06107	.08993	.63811	1.19262
1.050		.05593	-1.00829	-1.00378	.16137	-1.00650	.00000	-1.11354	-1.00124	-1.00800	.17228



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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ023) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEWON = -40.000  
 AIRLON = .000 BCLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -40.000 ELEV-R = -40.000

RUN NO. 125/0 RN/L = 3.01 GRADIENT INTERVAL = -5.05/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFWO	Q	CAF	CAB	COF	L/D
1.200	-7.71	-40560	25480	24930	-40900	22580	576.60000	.18815	.06115	.19364	-1.59198
1.202	3.79	-33250	24150	24370	-33090	20930	576.60000	.18319	.06051	.18100	-1.37682
1.204	1.406	-27410	23930	24600	-26820	20080	576.60000	.18432	.06168	.17768	-1.14544
1.206	1.904	-23930	23700	24480	-23120	19540	576.60000	.18393	.06187	.17615	-1.00938
1.208	3.834	-12750	23960	24760	-11120	18230	576.60000	.18485	.06275	.17700	-0.5214
1.210	5.803	-00830	23990	23950	-01600	15950	576.60000	.17619	.06330	.17691	-0.3459
1.195	7.820	11850	24710	22860	15100	13570	576.60000	.16336	.06524	.18239	.47969
1.193	9.787	24300	26200	21690	28400	11600	576.60000	.15251	.06439	.19857	.92740
1.195	12.800	41440	30580	20640	47180	09480	576.60000	.14135	.06505	.24236	1.35498
1.195	15.810	58100	36290	19090	65790	07320	576.60000	.12645	.06445	.30091	1.60090
1.195	18.830	74290	43030	16740	84210	05100	576.60000	.10318	.06422	.36946	1.72695
1.195	21.850	84830	51640	16350	97950	03270	576.60000	.09391	.07000	.45133	1.64300
1.197	24.880	93490	60580	15620	110300	06120	576.60000	.08431	.07189	.54054	1.54338
1.195	28.870	101900	72450	14220	124300	08210	576.60000	.06498	.07722	.65765	1.40733
GRADIENT		.06031	-.00298	-.00012	.06459	-.00925	.00001	-.00050	.00038	-.00332	.23239

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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ024) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. YMRP = 32.3015 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRRON = .000 BOFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 181/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CD	L/D
.599	-1.648	-1.12710	.08580	.08430	-1.12810	.07700	481.40000	.04357	.04033	.04541	-1.48280
.598	.236	-.08950	.08390	.08430	-.08920	.07730	481.40000	.04308	.04122	.04271	-1.06690
.601	3.241	.05370	.08240	.07920	.05850	.07690	481.40000	.03927	.03933	.04250	.65229
.605	6.236	.20060	.08790	.06530	.20910	.07510	481.40000	.02676	.03854	.04953	2.28466
.598	9.315	.35930	.10490	.04530	.37160	.07010	481.40000	.00671	.03859	.06677	3.42742
.598	12.350	.52110	.14040	.02570	.53910	.06690	481.40000	-.01351	.03921	.10211	3.71149
.599	15.390	.66410	.21410	.03020	.69710	.05990	481.40000	-.01188	.04208	.17355	3.10149
.597	18.460	.81160	.30380	.03150	.86600	.05220	481.40000	-.01388	.04508	.26104	2.67130
.597	21.440	.94820	.40620	.02670	1.03100	.04600	481.40000	-.01854	.05004	.35960	2.33430
.599	24.480	1.02000	.49400	.03490	1.13300	.07220	481.40000	-.02911	.05581	.44300	2.05584
.598	28.980	.91590	.54710	.03490	1.06600	.15880	481.40000	-.03318	.06888	.48746	1.67325
GRADIENT		.04679	-.00078	-.00141	.04823	-.00005	.00000	-.00122	-.00019	-.00058	.55437

RUN NO. 177/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CD	L/D
.797	-.638	-1.14110	.09010	.08850	-1.14210	.08990	640.70000	.04642	.04208	.04800	-1.56653
.802	.295	-.09650	.08750	.08800	-.09610	.08930	640.70000	.04751	.04049	.04701	-1.10339
.804	3.303	.05560	.08600	.08280	.06350	.08730	640.70000	.04324	.03936	.04666	.64737
.797	6.319	.21890	.09580	.07110	.22810	.08020	640.70000	.03306	.03804	.05797	2.28548
.794	9.331	.37560	.12950	.06690	.39160	.07190	640.70000	.02675	.04015	.08988	2.69959
.799	12.360	.49950	.18060	.07590	.52650	.07110	640.70000	.02914	.04036	.14117	2.76552
.799	15.460	.63730	.25500	.07550	.68220	.06130	640.70000	.03199	.04391	.21268	2.49910
.796	18.490	.77740	.33950	.07230	.84500	.05990	640.70000	.02680	.04870	.29339	2.26937
.796	21.570	.87100	.42200	.07250	.96510	.07810	640.70000	.01558	.05272	.37301	2.06361
.799	24.710	.89210	.49030	.07250	1.01500	.13450	640.70000	.00800	.06450	.43156	1.81932
.794	29.330	.90720	.59660	.07580	1.08300	.16530	640.70000	-.00067	.07647	.52991	1.52041
GRADIENT		.05008	-.00091	-.00157	.05157	-.00066	.00000	-.00096	-.00061	-.00029	.56677



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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L

(REJ524) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. ZMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 173/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.903	-1.654	-1.13420	.10120	.09970	-.13530	.09800	616.80000	.05699	.04271	.05853	-1.32514
.904	.288	-.08110	.09920	.09960	-.08060	.09800	616.80000	.05901	.04059	.05860	-.81757
.901	3.236	.08480	.10270	.09760	.09060	.08300	616.80000	.05693	.04167	.06205	.82650
.899	6.268	.23260	.12140	.09530	.24450	.07700	616.80000	.05566	.03964	.08203	1.91587
.904	9.294	.38660	.15920	.09450	.40720	.06340	616.80000	.05674	.03776	.12176	2.43106
.897	12.320	.51520	.20980	.09500	.54810	.05610	616.80000	.05122	.04178	.16894	2.45616
.899	15.370	.65330	.28280	.09960	.70490	.04200	616.80000	.05135	.04695	.23761	2.30949
.898	18.470	.78260	.36690	.10010	.85860	.04780	616.80000	.04042	.05168	.31794	2.13285
.902	21.540	.86580	.44810	.09890	.96990	.06830	616.80000	.04041	.05829	.39387	1.93231
.900	24.700	.88650	.51880	.10100	1.02200	.13300	616.80000	.03065	.07435	.45127	1.70828
.898	29.280	.96590	.64980	.09440	1.16200	.19030	616.80000	.01499	.07941	.58040	1.48634
GRADIENT	.05537	.00057	.00057	-.00056	.05712	-.00367	.00000	-.00018	-.00038	.00095	.54517

RUN NO. 169/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.052	-.615	-.08740	.16000	.15910	-.08910	.08650	627.40000	.09985	.05925	.10080	-.54600
1.050	.225	-.03850	.15780	.15820	-.03790	.07780	627.40000	.10048	.05752	.10033	-.24403
1.050	3.176	.15320	.16590	.15720	.16220	.04060	627.40000	.10022	.05698	.10905	.92345
1.048	6.109	.32690	.18870	.15280	.34520	.01100	627.40000	.09330	.05950	.12951	1.73309
1.046	9.141	.47930	.22550	.14650	.50910	-.00170	627.40000	.08578	.06072	.16557	2.12560
1.047	12.150	.62530	.28350	.14560	.67100	-.01030	627.40000	.08206	.06354	.20145	2.20523
1.047	15.210	.77440	.36100	.14520	.84190	-.01900	627.40000	.07744	.06776	.29561	2.14496
1.046	18.260	.92640	.45320	.14010	1.02200	-.02980	627.40000	.06871	.07139	.38547	2.04435
1.053	21.280	1.05100	.55530	.13590	1.18100	-.03820	627.40000	.06292	.07298	.48724	1.89312
1.048	24.380	1.09000	.64800	.13690	1.26800	-.04220	627.40000	.05627	.08063	.57467	1.69482
1.050	27.420	1.11000	.72680	.13380	1.32200	.03620	627.40000	.04907	.08473	.65143	1.52770
GRADIENT	.06385	.00187	.00187	-.00044	.06668	-.01224	-.00000	.00005	-.00049	.00238	.38967

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RM/L

(REJ524) ( 53 APR 74 )

## REFERENCE DATA

SHEF = 2.4210 SQ.FT.    ZMEP = 32.3010 IN.  
 LREF = 14.2440 IN.    YMEP = .0000 IN.  
 BREF = 20.1004 IN.    ZMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000    ELEWN = .000  
 AILRON = .000    BDFLAP = -11.700  
 SPDRK = 55.000    RUDDER = .000  
 ELEV-L = .000    ELEV-R = .000

RUN NO. 165/0    RM/L = 2.97    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFW	CAF	CAB	COF	L/D
1.199	-0.641	-0.07240	.16010	.16720	-0.07430	.07600	.569.90000	.05318	.11485	-43104
1.199	.197	-0.02790	.16750	.16760	-0.02730	.06640	.569.90000	.05358	.11393	-116642
1.202	3.114	.14610	.17370	.16550	.15530	.02790	.569.90000	.05478	.11893	-64103
1.203	6.257	.30790	.19420	.16170	.32670	-0.04720	.569.90000	.05500	.13950	1.52436
1.200	9.076	.46260	.22910	.15320	.49290	-0.01730	.569.90000	.05566	.17320	2.01944
1.197	12.116	.60970	.28210	.14800	.65530	-0.02520	.569.90000	.05567	.22373	2.16155
1.195	15.150	.76150	.35640	.14500	.82820	-0.04110	.569.90000	.05276	.29583	2.13560
1.195	18.180	.90180	.44540	.14170	.99570	-0.05540	.569.90000	.05547	.36309	2.02317
1.196	21.240	.99710	.53460	.13710	1.12300	-0.05680	.569.90000	.05333	.47000	1.86446
1.195	24.260	1.06800	.62630	.13280	1.23000	-0.03300	.569.90000	.07217	.56066	1.71235
1.201	27.250	1.13300	.72820	.12850	1.34100	-0.02350	.569.90000	.07608	.66061	1.55625
GRADIENT	.05857	.00166	.00166	-.00232	.06152	-.01291	.00200	.00042	.02127	.34747



DATE 06 JUL 74

## TABULATED SOURCE DATA - ON33A

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ARC 11-747 ON33A B C M F M V NOM. RN/L

(REJ025) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRCON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 352 / 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLFWO	Q	CAF	CAB	CDF	L/D
.597	-4.933	-.07790	.07990	.08020	-.07780	.07060	479.10000	.04170	.03810	.04170	-.97250
.598	-2.949	-.08150	.08120	.08130	-.08140	.07200	479.10000	.04199	.03931	.04199	-1.00123
.599	.027	-.09140	.08300	.08320	-.09120	.07340	479.10000	.04220	.04100	.04220	-1.09615
.599	3.116	-.09150	.08260	.08270	-.09130	.07160	479.10000	.04116	.04154	.04116	-1.09130
.598	5.166	-.08680	.08200	.08210	-.08670	.07000	479.10000	.03883	.04327	.03883	-1.05603
.599	6.848	-.08490	.07970	.07980	-.08480	.06690	479.10000	.03555	.04425	.03555	-1.06266
	GRADIENT	-.00173	.00035	.00036	-.00171	.00014	-.00000	-.00006	.00042	-.00006	-.01650

RUN NO. 178 / 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLFWO	Q	CAF	CAB	CDF	L/D
.798	-4.954	-.08400	.08350	.08360	-.08360	.08490	641.10000	.04549	.04051	.04549	-.97209
.799	-2.963	-.08800	.08610	.08650	-.08760	.08730	641.10000	.04628	.04022	.04628	-1.01272
.798	-.987	-.09320	.08710	.08750	-.09260	.08870	641.10000	.04716	.04034	.04716	-1.05829
.799	.026	-.09430	.08790	.08840	-.09380	.08880	641.10000	.04744	.04096	.04744	-1.06109
.798	1.059	-.09430	.08750	.08800	-.09450	.08860	641.10000	.04662	.04138	.04662	-1.07386
.798	3.117	-.09410	.08740	.08790	-.09360	.08690	641.10000	.04591	.04199	.04591	-1.06445
.797	5.179	-.09240	.08710	.08760	-.09200	.08390	641.10000	.04472	.04288	.04472	-1.05023
.797	7.237	-.08630	.08450	.08490	-.08590	.08070	641.10000	.04000	.04490	.04000	-1.01178
	GRADIENT	-.00138	.00028	.00028	-.00137	.00028	-.00000	.00008	.00020	.00008	-.01244

RUN NO. 349 / 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLFWO	Q	CAF	CAB	CDF	L/D
.903	-4.945	-.08170	.09780	.09790	-.08160	.08620	613.90000	.05479	.04311	.05479	-.83350
.902	-2.955	-.08500	.09720	.09760	-.08490	.08990	613.90000	.05811	.03969	.05811	-.86810
.897	.028	-.09660	.09700	.09740	-.09650	.09420	613.90000	.05651	.04089	.05651	-.99976
.903	3.121	-.09340	.09930	.09940	-.09330	.09310	613.90000	.05756	.04184	.05756	-.93863
.896	5.185	-.09590	.09760	.09770	-.09590	.08730	613.90000	.05371	.04399	.05371	-.98158
.901	6.734	-.09270	.09780	.09780	-.09270	.08290	613.90000	.05377	.04403	.05377	-.92740
	GRADIENT	-.00168	.00016	.00016	-.00168	.00014	.00000	.00022	-.00006	.00022	-.01584

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## TABULATED SOURCE DATA - 0453A

PAGE 6R

ARC 11-747 0453A B C H F M V NDM. RM/L

(REJ025) (02 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1104 IN. YMRP = 11.2900 IN.  
 SCALE = .00000 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 ALLCON = .0000 BDELAP = -11.7000  
 SPBRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 170/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.032	-4.953	-.02410	.16180	.16190	-.02350	.07400	628.00000	.09986	.16204	.09986	-14515
1.031	-2.961	-.02390	.15940	.15950	-.02240	.07290	628.00000	.09830	.06120	.09830	-14744
1.032	-.964	-.02290	.15980	.15990	-.02910	.07620	628.00000	.10126	.15864	.10126	-14199
1.032	.129	-.03430	.15860	.15890	-.03370	.07700	628.00000	.10113	.15777	.10113	-14208
1.049	1.057	-.03390	.15690	.15730	-.03330	.07580	628.00000	.09968	.05732	.09968	-121210
1.048	3.113	-.03470	.15870	.15820	-.03410	.07500	628.00000	.09919	.05901	.09919	-121555
1.053	5.184	-.03320	.16090	.16110	-.03260	.07320	628.00000	.10071	.06039	.10071	-121270
1.050	7.037	-.03490	.16030	.16040	-.03430	.07210	628.00000	.09670	.06370	.09670	-121134
GRADIENT		-.00166	-.00050	-.00049	-.00166	.00028	.00000	.00003	-.00052	.00003	-.01393

RUN NO. 347/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAE	CDF	L/D
1.201	-4.944	-.02170	.16810	.16810	-.02150	.06150	572.90000	.11071	.05739	.11071	-11779
1.204	-2.956	-.02400	.16780	.16780	-.02370	.06280	572.90000	.11285	.05495	.11285	-11114
1.202	.020	-.03020	.16660	.16670	-.02380	.06470	572.90000	.11341	.05329	.11341	-11775
1.199	3.119	-.03210	.16840	.16840	-.03190	.06430	572.90000	.11362	.05478	.11362	-11543
1.196	5.180	-.03410	.16810	.16800	-.03390	.06360	572.90000	.11177	.05643	.11177	-120155
1.200	6.700	-.03500	.16680	.16680	-.03550	.06270	572.90000	.11036	.05644	.11036	-121163
GRADIENT		-.00136	-.00020	-.00020	-.00137	.00037	-.00000	.00002	-.00032	.00002	-.01614

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## TABULATED SOURCE DATA - OAS3A

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ARC 11-747 OAS3A B C M F W V NOM. RN/L

(REJ026) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LRLF = 14.2440 IN. YMRP = .0000 IN.  
 BRFF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEWON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDBRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 183/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLIMD	Q	CAF	CAB	CDF	L/D
.800	-5.033	.41390	.11070	.03500	.42700	.06940	482.00000	-.00287	.03787	.07132	3.81560
.599	-2.995	.41260	.11210	.03670	.42600	.06940	482.00000	-.00235	.03905	.07166	3.75193
.600	-1.985	.40660	.11220	.03750	.42010	.06940	482.00000	-.00041	.03821	.07254	3.69551
.599	.027	.40540	.11200	.03790	.41890	.06950	482.00000	-.00138	.03928	.07138	3.68830
.599	1.041	.41110	.11310	.03790	.42470	.06910	482.00000	-.00028	.03818	.07347	3.70628
.597	3.061	.40730	.11290	.03840	.42090	.06790	482.00000	-.00226	.04066	.07086	3.67735
.598	5.087	.40870	.11260	.03790	.42220	.06560	482.00000	-.00431	.04221	.06907	3.69857
.600	7.102	.40990	.11030	.03540	.42300	.05950	482.00000	-.00807	.04347	.06551	3.78918
.598	9.123	.41110	.10900	.03400	.42400	.05740	482.00000	-.01139	.04539	.06241	3.84328
GRADIENT	-.00156	.00016	.00016	.00026	-.00053	-.00030	-.00000	.00002	.00024	-.00007	-.01054

RUN NO. 179/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLIMD	Q	CAF	CAB	CDF	L/D
.796	-5.033	.42700	.14400	.06520	.44580	.06820	639.10000	.02523	.03997	.10226	3.02005
.797	-3.036	.42500	.14570	.06710	.44430	.07020	639.10000	.02656	.04054	.10330	2.97348
.796	-.984	.42170	.14380	.06590	.44060	.07070	639.10000	.02708	.03882	.10318	2.98754
.795	.028	.41730	.14320	.06610	.43620	.07150	639.10000	.02615	.03995	.10150	2.96856
.801	1.046	.41920	.14520	.06770	.43850	.07210	639.10000	.02797	.03972	.10369	2.94142
.800	3.073	.41530	.14540	.06870	.43470	.07010	639.10000	.02940	.03930	.10444	2.90738
.795	5.107	.41760	.14410	.06700	.43660	.06800	639.10000	.02523	.04177	.10066	2.95022
.799	7.144	.41960	.14240	.06510	.43830	.06380	639.10000	.02278	.04232	.09854	2.99767
.796	9.168	.42560	.13970	.06140	.44370	.05560	639.10000	.01540	.04600	.09221	3.10001
GRADIENT	-.00156	.00003	.00003	.00033	-.00052	.00005	.00000	.00046	-.00014	.00019	-.01207

RUN NO. 350/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLIMD	Q	CAF	CAB	CDF	L/D
.902	-5.034	.42210	.17070	.09420	.44550	.06210	613.00000	.05444	.03976	.13097	2.48267
.903	-3.038	.42650	.17280	.09540	.45020	.06020	613.00000	.05589	.03951	.13322	2.47953
.899	.030	.41550	.16950	.09410	.43880	.06380	613.00000	.05446	.03964	.12983	2.46225
.902	3.076	.42100	.17120	.09490	.44450	.05970	613.00000	.05520	.03970	.13155	2.46868
.898	5.106	.41360	.16860	.09360	.43670	.06230	613.00000	.05202	.04158	.12707	2.46302
.903	7.137	.41940	.16990	.09400	.44270	.05600	613.00000	.05139	.04261	.12748	2.47661
GRADIENT	-.00090	-.00026	-.00026	-.00038	-.00094	-.00008	.00000	-.00011	.00003	-.00027	-.00178

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## TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REJ026) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2430 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRCRN = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 171/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLFWO	Q	CAF	CAB	CDF	L/D
1.051	-5.027	.52430	.24620	.15020	.55940	.00040	628.70000	.08358	.06622	.17584	2.14162
1.053	-3.007	.52810	.24710	.15030	.56340	-.00310	628.70000	.08728	.06332	.18379	2.15067
1.047	-1.385	.52500	.24300	.14690	.55950	-.00310	628.70000	.08319	.06371	.17908	2.17303
1.050	.030	.52520	.24340	.14730	.55900	-.00490	628.70000	.08480	.06250	.18072	2.16996
1.049	1.043	.52940	.24420	.14720	.56410	-.00470	628.70000	.08479	.06241	.18146	2.18167
1.052	3.085	.52700	.24570	.14920	.56200	-.00560	628.70000	.08670	.06250	.18298	2.15748
1.047	5.059	.52230	.24290	.14730	.55650	-.00180	628.70000	.08361	.06369	.17304	2.15267
1.050	7.125	.51830	.24550	.15050	.55340	.00330	628.70000	.08436	.06614	.17917	2.12377
1.047	9.151	.51920	.24180	.14660	.55360	.00160	628.70000	.08006	.06654	.17497	2.11611
	GRADIENT	.00005	-.00015	-.00015	.00002	-.00045	-.00000	-.00001	-.00014	-.00000	-.00144

RUN NO. 167/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLFWO	Q	CAF	CAB	CDF	L/D
1.202	-5.030	.51600	.24580	.15170	.55110	-.01900	570.80000	.09112	.06050	.18544	2.11697
1.202	-3.002	.51560	.24500	.15100	.55050	-.01330	570.80000	.09234	.05866	.18653	2.11182
1.199	-.981	.51430	.24440	.15060	.54910	-.02090	570.80000	.09300	.05760	.18694	2.11137
1.201	.033	.51510	.24460	.15070	.55000	-.02120	570.80000	.09333	.05731	.18748	2.11332
1.197	1.038	.51760	.24550	.15110	.55260	-.02250	570.80000	.09299	.05811	.18753	2.11620
1.199	3.066	.51680	.24640	.15220	.55200	-.02290	570.80000	.09198	.06022	.18644	2.11439
1.198	5.095	.51280	.24500	.15160	.54770	-.02460	570.80000	.09230	.05930	.18600	2.11321
1.197	7.119	.50290	.24380	.15220	.53780	-.01540	570.80000	.09105	.06112	.18308	2.06844
1.200	9.154	.50160	.24250	.15120	.53630	-.01570	570.80000	.08968	.06154	.18143	2.11383
	GRADIENT	.00034	.00026	.00020	.00040	-.00061	-.00000	-.00005	.00026	.00002	-.00056



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W Y NMN, RN/L

(REJ027) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 26.1004 IN. ZREF = 11.2900 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 ALLERN = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.600	-5.002	.90300	.36200	.02850	.96990	.04410	483.20000	-.01640	.04490	.31631	2.51505
.620	-2.992	.90460	.36480	.02960	.97490	.04300	483.20000	-.01617	.04577	.31824	2.50791
.640	.026	.91130	.36850	.03060	.98250	.04310	483.20000	-.01604	.04664	.32096	2.50222
.659	3.069	.90110	.36240	.02750	.97370	.04380	483.20000	-.01697	.04447	.31708	2.52343
.699	5.095	.89810	.35700	.02460	.96820	.04510	483.20000	-.02089	.04549	.31083	2.54405
.739	7.120	.89750	.35000	.02410	.96510	.04660	483.20000	-.02447	.04857	.30709	2.54771
GRADIENT		-.00009	-.00040	-.00035	-.00020	.00013	-.00000	-.00013	-.00022	-.00019	.00257

RUN NO. 180/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.798	-5.047	.85680	.39070	.06530	.93940	.06690	641.10000	.01818	.04712	.33838	2.24853
.798	-3.012	.85000	.39360	.07060	.93410	.06850	641.10000	.02138	.04922	.33957	2.21246
.798	-.981	.84680	.39560	.07260	.93360	.06950	641.10000	.02175	.05065	.33975	2.19373
.798	.033	.84310	.39510	.07430	.92810	.06900	641.10000	.02229	.05201	.33838	2.18650
.798	1.037	.84190	.39510	.07470	.92700	.06970	641.10000	.02374	.05096	.33936	2.18348
.797	3.076	.83970	.39240	.07310	.92400	.06920	641.10000	.02373	.04927	.33833	2.19193
.794	5.146	.84090	.38830	.06900	.92370	.06830	641.10000	.01756	.05144	.33243	2.21764
.796	7.185	.83890	.38230	.06420	.91970	.06170	641.10000	.01495	.04925	.32861	2.24677
.797	9.230	.84240	.37630	.05750	.90080	.05600	641.10000	.00747	.05023	.32195	2.29183
GRADIENT		-.00186	-.00023	.00047	-.00181	.00011	-.00000	.00044	.00003	-.00020	-.00382

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.902	-5.060	.82630	.40510	.09430	.91550	.06330	615.90000	.04043	.03387	.35111	2.06116
.901	-3.017	.83170	.41090	.09820	.92240	.05940	615.90000	.04513	.03307	.35789	2.04334
.902	.034	.84140	.41000	.10050	.92450	.05540	615.90000	.04758	.03292	.36406	2.03734
.899	3.101	.83770	.41350	.09850	.92970	.05720	615.90000	.04281	.03569	.35736	2.04556
.905	5.143	.83510	.41140	.09760	.92580	.05610	615.90000	.04359	.03401	.35760	2.04867
.897	7.185	.83680	.40240	.08870	.92430	.05660	615.90000	.03428	.03442	.34835	2.09824
GRADIENT		.00038	.00042	.00005	.00108	-.00036	-.00000	-.00038	.00043	.00001	.00035

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## TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM, RN/L

(REJ027) (03 APR 74)

## REFERENCE DATA

SREF = 2.42:0 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 BOFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-H = .000 ELEV-L = .000

RUN NO. 172/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/D
1.052	-5.040	1.00300	.51360	.13440	1.11800	-.03050	628.40000	.06429	.07312	.44279	1.37496
1.051	-5.113	1.00400	.51960	.13820	1.12500	-.03560	628.40000	.06450	.07377	.44519	1.36232
1.051	-5.197	1.00200	.52340	.13680	1.14000	-.04180	628.40000	.06512	.07169	.45110	1.37611
1.048	-5.119	1.02300	.52350	.13630	1.14100	-.04180	628.40000	.06437	.07232	.45174	1.37610
1.050	-5.104	1.02100	.52410	.13790	1.14000	-.04150	628.40000	.06276	.07512	.44869	1.37134
1.046	-5.066	1.00900	.52180	.13920	1.12700	-.03430	628.40000	.06522	.07322	.44746	1.35913
1.051	-5.125	.93410	.51030	.13470	1.10900	-.02690	628.40000	.06617	.06917	.44182	1.35836
1.053	-7.162	.96480	.50490	.13310	1.09900	-.02500	628.40000	.06332	.06916	.43555	1.37164
1.051	-5.216	.97280	.50060	.13080	1.09100	-.02340	628.40000	.06249	.06621	.43136	1.37659
GRADIENT		.00000	.00010	.00020	.00029	.00012	.00000	.00010	.00010	.00012	-1.00071

RUN NO. 340/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/D
1.200	-5.035	.96110	.45080	.13560	1.07600	-.04490	572.70000	.07204	.06356	.43571	1.36724
1.203	-3.010	.97080	.50520	.13290	1.06600	-.05570	572.70000	.07166	.06810	.43737	1.33141
1.202	-3.021	.97490	.50610	.13450	1.05900	-.05240	572.70000	.07121	.06729	.43571	1.35233
1.199	-3.076	.96900	.50550	.13980	1.06400	-.05570	572.70000	.07237	.06743	.43476	1.33343
1.197	-5.122	.95320	.49790	.13620	1.07200	-.05200	572.70000	.07250	.06370	.43476	1.35233
1.199	-7.156	.95140	.49190	.13310	1.06300	-.04620	572.70000	.07173	.06237	.43003	1.35117
GRADIENT		-.00000	.00000	.00015	-.00033	.00000	.00000	.00026	-.00011	.00013	-1.00010



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## TABULATED SOURCE DATA - QAS3A

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APC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ028) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1904 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 284/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = .000  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-.633	-.08790	.05960	.05860	-.08850	.03880	477.10000	.02803	.03057	.02901	-1.47459
.598	-.636	-.08700	.05920	.05930	-.05690	.03940	477.10000	.02660	.03270	.02651	-.96242
.600	.593	-.03180	.05830	.05860	-.03120	.03940	477.10000	.02706	.03154	.02673	-.54578
.600	1.615	.01560	.05750	.05710	.01720	.03870	477.10000	.02446	.03264	.02494	.27073
.599	3.567	.10810	.05880	.05200	.11160	.03870	477.10000	.02059	.03141	.02750	1.83793
.598	5.554	.20470	.06340	.04330	.20990	.03740	477.10000	.01185	.03145	.03211	3.22849
.597	7.611	.30910	.07270	.03110	.31600	.03500	477.10000	-.00002	.03112	.04183	4.25290
.597	9.598	.41520	.08770	.01730	.42380	.03050	477.10000	-.01438	.03168	.05649	4.73078
.597	12.630	.57480	.12680	-.00190	.58860	.02350	477.10000	-.03424	.03234	.09329	4.53127
.599	18.730	.87100	.30530	.00380	.75190	.01290	477.10000	-.03233	.03613	.17222	3.49112
.595	21.720	1.02920	.41690	.02650	1.11020	.04630	477.10000	-.03214	.04164	.26591	2.85240
.598	24.710	1.10300	.51080	.00310	1.21500	.02820	477.10000	-.04948	.04602	.37407	2.46820
.598	28.650	.96950	.55200	.01950	1.11500	.11600	477.10000	-.05264	.05258	.46295	2.15864
GRADIENT		.04688	-.00021	-.00171	.04786	-.00011	.00000	-.00179	.00008	-.00025	1.75661
											.779381

RUN NO. 283/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.800	-.665	-.09900	.06370	.06250	-.09970	.04710	641.80000	.02910	.03340	.03026	-1.55478
.801	-.673	-.06510	.06200	.06210	-.06500	.04670	641.80000	.03028	.03182	.03019	-1.04937
.801	1.102	-.01190	.06080	.06100	-.01070	.04520	641.80000	.02877	.03223	.02856	-.19530
.801	1.612	.01380	.06100	.06060	.01560	.04510	641.80000	.02859	.03201	.02902	.22763
.802	3.552	.11320	.06250	.05540	.11680	.04490	641.80000	.02409	.03131	.03128	1.80943
.801	5.552	.22170	.07040	.04860	.22750	.04030	641.80000	.01812	.03048	.04004	3.15037
.799	7.607	.33230	.08910	.04430	.34120	.03320	641.80000	.01340	.03090	.05845	3.73084
.800	9.581	.42820	.11670	.04380	.44170	.02900	641.80000	.01140	.03240	.06476	3.66945
.798	12.610	.56320	.16940	.04230	.58660	.02990	641.80000	.00715	.03515	.13504	3.32590
.800	15.740	.70310	.25170	.05210	.74500	.01800	641.80000	.01085	.04125	.21204	2.79284
.799	18.730	.83900	.34150	.05400	.90420	.01550	641.80000	.01085	.04670	.29726	2.45683
.798	21.740	.94110	.43110	.05190	1.03400	.03120	641.80000	-.00128	.05318	.38180	2.18283
.799	24.700	.94850	.49580	.05410	1.06900	.08620	641.80000	-.01371	.06781	.43425	1.91306
.796	28.660	.94150	.58300	.06200	1.10600	.11610	641.80000	-.01852	.07852	.51420	1.61502
GRADIENT		.09057	-.00022	-.00163	.05159	-.00055	.00000	-.00130	-.00038	.00019	.80478

ARC 11-747 QMS3A B C H F U2 V NDM. RN/L

(REJ028) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2900 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRRON = .0000 BDFLAP = .0000  
 SPDBRK = 25.0000 RUDEF = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 282/ 5 RN/L = 3.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CCF	L/D
.898	-1.662	-.09840	.07250	.07130	-.09330	.05440	609.90000	.03870	.03260	.03984	-1.35930
.900	.059	-.05710	.07210	.07210	-.05710	.05030	609.90000	.03334	.03276	.03928	-1.73362
.899	1.074	.02230	.07170	.07160	.06370	.04360	609.90000	.03879	.03281	.03885	.03290
.899	1.012	.03370	.07320	.07230	.03580	.04280	609.90000	.03525	.03305	.04023	.45081
.902	3.536	.14050	.08130	.07240	.14520	.03770	609.90000	.03545	.03285	.04873	1.72341
.899	5.535	.23620	.09460	.07130	.24480	.03480	609.90000	.03507	.03223	.06250	2.51352
.900	7.596	.33670	.11650	.07090	.34910	.02920	609.90000	.03314	.03176	.06435	2.83170
.899	9.565	.42770	.14150	.07040	.44560	.02560	609.90000	.03535	.03445	.10349	2.86105
.900	12.530	.56650	.20000	.07170	.59650	.01720	609.90000	.03465	.03113	.16164	2.82039
.900	15.650	.70760	.27650	.07590	.75590	.01250	609.90000	.03274	.03233	.20544	2.86795
.900	18.710	.84290	.36670	.07630	.91630	.00130	609.90000	.02633	.04657	.22166	2.83880
.899	21.720	.92650	.45300	.07800	1.02800	.02220	609.90000	.01736	.06014	.39712	2.84410
.898	24.710	.92740	.51770	.08270	1.05900	.06640	609.90000	.00534	.07716	.44772	1.79310
.901	28.680	1.00000	.63080	.08020	1.18400	.10090	609.90000	-.00276	.06036	.56500	1.56616
GRADIENT	.05712	.00213	.00213	.00222	.05636	-.00356	.00000	.00003	.00000	.00206	.73379

RUN NO. 281/ 5 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CCF	L/D
1.050	-1.653	-.07030	.13280	.13260	-.07180	.05170	626.90000	.07329	.05271	.08011	-1.52325
1.051	.042	-.02640	.13210	.13210	-.02590	.04340	626.90000	.06006	.05202	.08006	-1.10500
1.052	1.066	.04580	.13440	.13560	.04230	.02910	626.90000	.08052	.05308	.06140	.11182
1.055	1.582	.07760	.13710	.13490	.03140	.02240	626.90000	.08264	.05226	.05466	.05601
1.050	3.537	.27260	.14510	.13230	.21120	.00050	626.90000	.08007	.05223	.02295	1.19504
1.051	5.518	.31530	.16220	.13100	.33040	-.01810	626.90000	.07742	.05358	.00803	1.15133
1.054	7.592	.40300	.18740	.12990	.44400	-.02930	626.90000	.07537	.05160	.03330	2.03880
1.051	9.569	.51700	.21380	.12480	.54530	-.03420	626.90000	.07105	.05475	.15973	2.41070
1.050	12.600	.67460	.27620	.12230	.71460	-.04560	626.90000	.06831	.05339	.21815	2.44322
1.049	15.650	.82540	.35290	.12290	.83160	-.05550	626.90000	.05794	.05436	.29631	2.31070
1.049	18.710	.98870	.46260	.12100	1.06500	-.07480	626.90000	.04535	.07105	.39535	2.11770
1.050	21.710	1.11900	.57480	.11940	1.25200	-.08900	626.90000	.04168	.07772	.50265	1.73500
1.051	24.720	1.15300	.66080	.11790	1.32400	-.04690	626.90000	.03659	.06031	.58631	1.74440
20.635	1.15100	.76220	.11730	.11730	1.37600	.00990	626.90000	.02543	.03107	.68162	1.51163
GRADIENT	.06531	.00313	.00314	.00314	.06773	-.00230	.00000	.00005	-.00005	.00321	.46100



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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. EN/L

(REJ028) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    ZREF = 32.3010 IN.  
 LREF = 14.2440 IN.    YREF = 10.0000 IN.  
 BREF = 28.1004 IN.    ZREF = 11.2500 IN.  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

BETA = 0.000    ELEWON = 0.000  
 AILRON = 0.000    BDFLAP = 0.000  
 SPDRK = 25.000    RUDDER = 0.000  
 ELEV-L = 0.000    ELEV-R = 0.000

RUN NO. 2807 0    RN/L = 2.97    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CMFWD	Q	CAF	CAB	CDF	L/D
1.200	-0.655	-0.04310	.14310	.14250	-0.05070	.03630	567.30000	.09100	.05150	.09158	-1.34295
1.204	-0.648	-0.04300	.14250	.14250	-0.05070	.02620	567.30000	.09167	.05083	.09166	-1.06892
1.208	-0.641	-0.04290	.14250	.14250	-0.05070	.01610	567.30000	.09141	.05079	.09239	-1.35811
1.212	-0.634	-0.04280	.14250	.14250	-0.05070	.00600	567.30000	.09185	.05115	.09319	.57219
1.216	-0.627	-0.04270	.14250	.14250	-0.05070	-.00410	567.30000	.09203	.05167	.10155	1.28274
1.220	-0.620	-0.04260	.14250	.14250	-0.05070	-.01410	567.30000	.09220	.05150	.11716	1.78962
1.224	-0.613	-0.04250	.14250	.14250	-0.05070	-.02410	567.30000	.09238	.05145	.13765	2.15390
1.228	-0.606	-0.04240	.14250	.14250	-0.05070	-.03410	567.30000	.09256	.05342	.16480	2.34621
1.232	-0.599	-0.04230	.14250	.14250	-0.05070	-.04410	567.30000	.09273	.05663	.22245	2.33102
1.236	-0.592	-0.04220	.14250	.14250	-0.05070	-.05410	567.30000	.09291	.06119	.30121	2.26642
1.240	-0.585	-0.04210	.14250	.14250	-0.05070	-.06410	567.30000	.09319	.06621	.39415	2.09469
1.244	-0.578	-0.04200	.14250	.14250	-0.05070	-.07410	567.30000	.09347	.07025	.48105	1.91292
1.248	-0.571	-0.04190	.14250	.14250	-0.05070	-.08410	567.30000	.09375	.07417	.57516	1.73561
1.252	-0.564	-0.04180	.14250	.14250	-0.05070	-.09410	567.30000	.09403	.07799	.66800	1.54014
1.256	-0.557	-0.04170	.14250	.14250	-0.05070	-.10410	567.30000	.09431	.08240	.76100	.38939

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NM. RN/L

(REJ029) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 219/0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.598	-4.943	-.06760	.06270	.06270	-.06750	.05430	475.80000	.02826	.03444	.02826	-1.07656
.600	-2.954	-.07100	.06510	.06510	-.07090	.05600	475.80000	.03073	.03437	.03073	-1.08909
.600	-1.976	-.07760	.06630	.06630	-.07750	.05720	475.80000	.03198	.03432	.03198	-1.16893
.596	.019	-.07990	.06670	.06660	-.07980	.05750	475.80000	.03126	.03354	.03126	-1.15461
.601	1.046	-.08070	.06670	.06680	-.08070	.05740	475.80000	.03240	.03440	.03240	-1.20802
.599	3.111	-.07910	.06680	.06690	-.07900	.05570	475.80000	.03153	.03637	.03153	-1.16167
.597	5.161	-.07720	.06550	.06560	-.07710	.05340	475.80000	.02755	.03405	.02755	-1.17591
.599	6.745	-.07370	.06450	.06460	-.07360	.05210	475.80000	.02465	.03375	.02465	-1.13932
GRADIENT		-.00168	.00050	.00052	-.00169	.00023	-1.00000	.00031	.00021	.00031	-0.0169

RUN NO. 214/0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.733	-4.958	-.07430	.06700	.06710	-.07420	.06300	642.80000	.03173	.03537	.03173	-1.13141
.731	-2.969	-.07870	.06890	.06940	-.07860	.06550	642.80000	.03510	.03390	.03510	-1.13113
.602	-1.977	-.08460	.06970	.06990	-.08450	.06760	642.80000	.03570	.03420	.03570	-1.21157
.603	.022	-.08530	.07010	.07020	-.08500	.06770	642.80000	.03608	.03412	.03608	-1.22320
.600	1.050	-.08650	.06990	.07010	-.08670	.06770	642.80000	.03568	.03422	.03568	-1.21660
.737	3.112	-.08560	.07010	.07020	-.08560	.06650	642.80000	.03373	.03647	.03373	-1.21377
.736	5.179	-.08840	.06960	.06970	-.08830	.06350	642.80000	.03216	.03754	.03216	-1.22362
GRADIENT		-.00156	.00037	.00037	-.00157	.00046	-1.00000	.00026	.00011	.00026	-0.01654

RUN NO. 213/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.912	-4.961	-.05700	.06000	.06010	-.05690	.06300	616.30000	.04403	.03607	.04403	-1.71136
.912	-2.967	-.06230	.06050	.06060	-.06210	.06690	616.30000	.04465	.03575	.04465	-1.77117
.901	-.977	-.06680	.06150	.06160	-.06670	.07070	616.30000	.04659	.03501	.04659	-1.84111
.904	.019	-.07070	.06300	.06310	-.07050	.07100	616.30000	.04742	.03568	.04742	-1.84111
.906	1.050	-.07350	.06360	.06370	-.07320	.07180	616.30000	.04680	.03510	.04680	-1.83571
.903	3.111	-.07210	.06290	.06300	-.07200	.06900	616.30000	.04680	.03621	.04680	-1.83571
.900	5.174	-.07270	.06150	.06160	-.07260	.06520	616.30000	.04426	.03734	.04426	-1.83571
.899	6.765	-.07520	.06390	.06400	-.07510	.06660	616.30000	.04196	.04214	.04196	-1.83571
GRADIENT		-.00194	.00046	.00046	-.00195	.00023	-1.00000	.00037	.00012	.00037	-0.01542



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NMH. RN/L

(REJ029) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMEP = 22.3510 IN.  
 LREF = 14.2440 IN. YMEP = .0000 IN.  
 BREF = 28.1004 IN. YMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRCRN = .000 BOFLAP = -11.700  
 SPOBCK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 205/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFLO	Q	CAF	CAB	COF	L/D
1.052	-4.961	-0.01970	.14200	.14200	-0.01950	.03240	628.30000	.08398	.05802	.08398	-1.13732
1.054	-2.965	-0.02030	.14390	.14390	-0.02010	.03360	628.30000	.08750	.05690	.08750	-1.13965
1.051	-5.965	-0.02470	.14200	.14200	-0.02450	.03470	628.30000	.08698	.05502	.08698	-1.17254
1.048	.018	-0.03130	.14180	.14190	-0.03110	.03770	628.30000	.08766	.05424	.08766	-1.21917
1.050	1.049	-0.03200	.14200	.14200	-0.03170	.03810	628.30000	.08639	.05531	.08639	-1.22277
1.053	3.114	-0.03200	.14200	.14200	-0.03180	.03800	628.30000	.08813	.05717	.08813	-1.21886
1.051	5.177	-0.03200	.14480	.14490	-0.03170	.03500	628.30000	.08712	.05778	.08712	-1.21877
1.050	6.863	-0.03280	.14660	.14660	-0.03260	.03500	628.30000	.08553	.06107	.08553	-1.22237
GRADIENT		-0.00187	.00021	.00022	-0.00187	.00081	.00000	.00042	-.00020	.00042	-0.01277

RUN NO. 205/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFLO	Q	CAF	CAB	COF	L/D
1.202	-4.950	-0.02090	.14930	.14930	-0.02080	.03840	569.90000	.09459	.05471	.09459	-1.05894
1.199	-2.953	-0.01100	.14930	.14930	-0.01080	.04070	569.90000	.09699	.05231	.09699	-0.97234
1.199	-.966	-0.01510	.14970	.14970	-0.01490	.04230	569.90000	.09783	.05187	.09783	-0.99953
1.201	.020	-0.01740	.15060	.15060	-0.01720	.04230	569.90000	.09830	.05230	.09830	-1.1421
1.202	1.049	-0.01830	.15160	.15160	-0.01810	.04300	569.90000	.09873	.05287	.09873	-1.11959
1.199	3.121	-0.01970	.15380	.15380	-0.01950	.04340	569.90000	.09888	.05492	.09888	-1.12679
1.201	5.173	-0.02360	.15420	.15420	-0.02340	.04430	569.90000	.09898	.05522	.09898	-1.15175
1.203	6.751	-0.02600	.15320	.15320	-0.02590	.04550	569.90000	.09700	.05620	.09700	-1.16906
GRADIENT		-0.00145	.00055	.00055	-0.00145	.00062	-.00000	.00052	.00003	.00052	-0.00926

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NMN. RN/L

(REJ035) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BDFLAF = -11.700  
 SFDNRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 218/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.598	-5.017	.42990	.09420	.01730	.43970	.05120	480.80000	-.01519	.03249	.06139	4.61450
.597	-3.002	.42730	.09540	.01900	.43740	.130	480.80000	-.01340	.03240	.06276	4.51545
.596	-1.983	.42230	.09640	.02180	.43270	.180	480.80000	-.01164	.03244	.06367	4.41861
.595	.022	.41760	.09620	.02150	.42800	.0	480.80000	-.01176	.03276	.06274	4.37473
.599	1.037	.42470	.09790	.02190	.43530	.05	480.80000	-.01277	.03457	.06311	4.37320
.598	3.054	.42220	.09840	.02280	.43290	.10	480.80000	-.012-3	.03563	.06254	4.32635
.599	5.080	.42110	.09740	.02210	.43170	.14720	480.80000	-.01448	.03658	.06171	4.35355
.597	7.101	.42030	.09760	.02240	.43090	.184910	480.80000	-.01721	.03961	.05768	4.33904
.599	9.131	.41620	.09870	.02430	.42700	.24600	480.80000	-.01721	.04151	.05720	4.24449
GRADIENT		-.00064	.00052	.00062	-.00054	-.00036	.00000	.00003	.00089	-.00007	-.00005

RUN NO. 215/0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.798	-5.040	.43780	.12580	.04690	.45310	.04780	641.30000	-.01383	.03307	.09230	3.50183
.797	-3.012	.43770	.12560	.04580	.45340	.04380	641.30000	-.01514	.03446	.09364	3.43239
.796	-1.987	.43060	.12860	.05160	.44640	.05030	641.30000	-.01617	.03443	.09314	3.32311
.799	.026	.42620	.12810	.05120	.44210	.05190	641.30000	-.01654	.03466	.09306	3.35314
.797	1.040	.43090	.12870	.05190	.44680	.05150	641.30000	-.01763	.03337	.09494	3.37334
.799	3.065	.42590	.12880	.05200	.44190	.05030	641.30000	-.01809	.03392	.09257	3.33078
.798	5.102	.42430	.12850	.05200	.44030	.04910	641.30000	-.01473	.03727	.09096	3.32568
.799	7.132	.42540	.12740	.05080	.44110	.04720	641.30000	-.01328	.03752	.08967	3.36094
.800	9.161	.42840	.12900	.05180	.44440	.04450	641.30000	-.01129	.04032	.08828	3.34409
GRADIENT		-.00173	.00005	.00038	-.00168	.00013	.00000	.00021	.00016	-.00008	-.00003

RUN NO. 212/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.902	-5.043	.44360	.15690	.07670	.46400	.04130	615.90000	-.04133	.03637	.12133	2.64278
.903	-3.013	.44390	.15760	.07730	.46470	.04120	615.90000	-.04341	.03369	.12344	2.63266
.903	-1.990	.43900	.15860	.07930	.46010	.04170	615.90000	-.04470	.03460	.12392	2.78079
.904	.022	.43860	.15920	.07980	.45970	.04130	615.90000	-.04404	.03436	.12399	2.77133
.900	1.037	.43800	.15930	.08000	.45910	.04390	615.90000	-.04306	.03594	.12213	2.76177
.902	3.069	.44180	.16070	.08080	.46290	.04060	615.90000	-.04529	.03551	.12048	2.76021
.902	5.101	.43720	.15930	.08040	.46040	.04040	615.90000	-.04589	.03732	.12151	2.71103
.901	7.133	.43200	.15850	.08040	.45310	.04350	615.90000	-.04122	.03918	.11927	2.71103
.909	8.472	.43620	.16200	.08110	.45780	.03770	615.90000	-.03745	.04065	.11931	2.71103
GRADIENT		-.00039	.00040	.00055	-.00031	.00002	.00000	.00000	.00035	-.00014	-.00003

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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NWM. RN/L

(REJ030) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEWON = .0000  
 AIRLON = .0000 BOFLAP = -11.7000  
 SPCBRK = 25.0000 RUDDER = -10.0000  
 ELEW-L = .0000 ELEW-R = .0000

RUN NO. 209/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDP	L/D
1.053	-5.036	.53650	.23150	.13400	.56800	-.01740	629.70000	.07358	.06042	.17124	2.32686
1.052	-3.013	.53820	.22990	.13200	.57010	-.01870	629.70000	.07410	.05790	.17197	2.35169
1.050	-.990	.53570	.22900	.13100	.56760	-.01950	629.70000	.07495	.05665	.17237	2.34974
1.051	.019	.53470	.23000	.13200	.56680	-.01930	629.70000	.07614	.05666	.17341	2.33470
1.050	1.036	.53800	.23180	.13300	.57110	-.01870	629.70000	.07650	.05730	.17451	2.33478
1.049	3.062	.53700	.23270	.13500	.56950	-.01780	629.70000	.07593	.05907	.17367	2.31798
1.050	5.090	.53290	.23340	.13650	.56550	-.01630	629.70000	.07546	.06104	.17251	2.29213
1.046	7.116	.53030	.23340	.13690	.56300	-.01220	629.70000	.07365	.06325	.17029	2.28165
1.048	9.146	.52820	.23270	.13660	.56080	-.00920	629.70000	.07248	.06412	.16876	2.27919
	GRADIENT	-.02282	.00055	.00055	.00008	.00017	.00000	.00035	.00021	.00036	-.00573

RUN NO. 216/0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDP	L/D
1.198	-5.027	.53040	.23190	.13540	.56280	-.03640	569.30000	.08079	.05531	.17660	2.29685
1.198	-3.003	.52820	.23060	.13430	.56140	-.03690	569.30000	.08053	.05377	.17679	2.30434
1.201	-.990	.52820	.23150	.13540	.56060	-.03910	569.30000	.08252	.05288	.17662	2.29126
1.200	.021	.52890	.23200	.13570	.56130	-.03930	569.30000	.08180	.05390	.17802	2.28988
1.199	1.040	.53280	.23380	.13670	.56360	-.03910	569.30000	.08210	.05460	.17907	2.29030
1.199	3.054	.53020	.23530	.13870	.56300	-.03900	569.30000	.08203	.05667	.17855	2.26305
1.196	5.091	.52360	.23490	.13950	.55670	-.03610	569.30000	.08182	.05768	.17725	2.23891
1.197	7.110	.51480	.23360	.13990	.54780	-.03190	569.30000	.08153	.05837	.17542	2.21205
1.201	9.144	.51250	.23260	.13930	.54530	-.03090	569.30000	.08092	.05838	.17438	2.21166
	GRADIENT	.00035	.00081	.00072	.00049	-.00031	-.00000	.00020	.00052	.00028	-.00627

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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NDM. RN/L

(REJ031) (03 APR 74)

## REFERENCE DATA

SSEF = 2.4210 SQ.FT. YMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1024 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEWON = .0000  
 AIRLON = .0000 BDPLAP = -11.7000  
 SFBK = 25.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 217/0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.62	-5.009	.91910	.35220	.01280	.98420	.02340	484.90000	-.02624	.04144	.31373	2.64013
.65	-2.994	.92120	.35690	.01650	.98740	.02630	484.90000	-.02657	.04307	.31274	2.61890
.68	-.965	.92280	.35930	.01770	.99010	.02680	484.90000	-.02577	.04347	.31442	2.60181
.70	.017	.91900	.35760	.01740	.98590	.02690	484.90000	-.02437	.04187	.31431	2.60279
.72	1.034	.92050	.35840	.01760	.98760	.02740	484.90000	-.02497	.04277	.31472	2.61067
.75	3.063	.91820	.35430	.01530	.98430	.02630	484.90000	-.02763	.04293	.31469	2.62004
.80	5.030	.91720	.34620	.01100	.97590	.02840	484.90000	-.03205	.04305	.31435	2.65355
.85	7.116	.91100	.34580	.00980	.97440	.02810	484.90000	-.03696	.04656	.29653	2.65547
.90	9.242	.91120	.34280	.00690	.97350	.02730	484.90000	-.04010	.04711	.29527	2.64804
.95	-0.0034	.90850	.34034	-.00017	-.02058	.02616	-.00000	-.04012	-.04110	-.03131	2.61131

GRADIENT

RUN NO. 216/0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.70	-5.056	.86070	.37530	.05170	.94420	.04550	641.30000	.01670	.04500	.32323	2.5346
.72	-3.020	.85370	.37580	.05710	.93100	.04670	641.30000	.01267	.04453	.33123	2.53375
.74	-.986	.85310	.37310	.05960	.93350	.04680	641.30000	.01170	.04410	.33027	2.52141
.76	.030	.85290	.37270	.06020	.93130	.04660	641.30000	.01228	.04722	.33072	2.52783
.80	1.055	.85150	.37360	.06140	.93030	.04780	641.30000	.01314	.04626	.33153	2.52607
.85	3.090	.85060	.37590	.05840	.92810	.04740	641.30000	.01094	.04742	.32775	2.52885
.90	5.134	.84770	.37000	.05400	.92340	.04540	641.30000	.00620	.04580	.32353	2.53670
.95	7.179	.84300	.36490	.05110	.91720	.04450	641.30000	.00483	.04627	.31824	2.53442
.98	9.224	.84810	.36070	.04550	.92050	.04340	641.30000	-.00177	.04727	.31316	2.53543
.99	-0.0063	.84663	.35804	.04227	-.02058	-.04024	-.00000	-.00016	.00043	-.00035	2.53205

GRADIENT

RUN NO. 211/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.90	-5.061	.84430	.39990	.06340	.93340	.04680	614.90000	.03164	.05176	.34795	2.13262
.92	-3.022	.83370	.40610	.06580	.94140	.03980	614.90000	.03359	.05221	.35354	2.12437
.94	-.989	.85320	.40760	.06750	.94150	.03890	614.90000	.03332	.05418	.35333	2.11466
.96	.028	.85600	.40970	.06840	.94490	.03650	614.90000	.03466	.05374	.35574	2.11125
.98	1.034	.85430	.40870	.06780	.94290	.03730	614.90000	.03398	.05352	.35422	2.11102
.99	3.094	.84610	.40230	.06400	.93300	.03960	614.90000	.03271	.05200	.34884	2.11573
.99	5.138	.84290	.39680	.06060	.92810	.03890	614.90000	.03111	.05163	.34674	2.11264
.99	7.180	.84110	.39260	.05770	.92490	.04210	614.90000	.02565	.05134	.34134	2.11646
.99	9.227	.83720	.38640	.05320	.91920	.04480	614.90000	.02040	.04991	.33627	2.11192
.99	-0.0007	.83107	.38051	-.00013	-.02017	-.04011	-.00000	-.00000	-.04014	-.00049	2.11116

GRADIENT





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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ031) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRCON = .000 BOFLAP = -11.700  
 SPOBRK = 25.000 RUDE = -10.000  
 ELEV-L = .000 ELEV = .000

RUN N°. 210/0 RN/L = 3.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.048	-5.046	1.02200	.50770	.12280	1.13500	-.05020	626.50000	.05228	.07052	.43732	2.03451
1.055	-5.021	1.02400	.51230	.12650	1.13800	-.05540	626.50000	.05528	.07122	.44117	2.01553
1.061	-4.997	1.03000	.51710	.12990	1.15300	-.06090	626.50000	.05446	.07144	.44552	2.02944
1.069	-4.920	1.03900	.51740	.12590	1.15400	-.06120	626.50000	.05491	.07099	.44629	2.02992
1.047	1.030	1.03000	.51860	.12750	1.15300	-.05880	626.50000	.05499	.07251	.44602	2.02244
1.051	3.078	1.02200	.51360	.12840	1.13700	-.05140	626.50000	.05716	.07124	.44259	2.01069
1.046	5.114	1.01000	.50470	.12430	1.12200	-.04360	626.50000	.05426	.07004	.43473	2.02142
1.046	7.154	.99960	.49800	.12190	1.11000	-.03890	626.50000	.05350	.06840	.42991	2.02628
1.050	9.198	.99340	.49460	.12090	1.10300	-.03880	626.50000	.05331	.06759	.42734	2.02733
GRADIENT		-.00030	.00026	.00036	-.00015	.00070	.00000	.00030	.00006	.00023	-.00165

RUN NO. 207/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.200	-5.041	.97570	.49420	.12550	1.08600	-.06890	569.50000	.06903	.06547	.42785	1.99765
1.200	-5.012	.98290	.49870	.12710	1.09500	-.07230	569.50000	.06890	.06630	.43164	1.99514
1.198	-4.990	.98150	.49970	.12840	1.09400	-.07010	569.50000	.06195	.06645	.43238	1.98879
1.193	-4.924	.98220	.50020	.12870	1.09500	-.06960	569.50000	.06261	.06609	.43334	1.98798
1.195	1.035	.98430	.50150	.12920	1.09700	-.07030	569.50000	.06215	.06705	.43360	1.98680
1.195	3.078	.97550	.49920	.13010	1.08800	-.06720	569.50000	.06225	.06785	.43061	1.97834
1.194	5.109	.96290	.48920	.12510	1.07300	-.05920	569.50000	.06105	.06405	.42435	1.99261
1.200	7.147	.96090	.48470	.12190	1.06900	-.06270	569.50000	.06237	.05953	.42423	2.00521
1.201	9.188	.95380	.47890	.11920	1.06100	-.06130	569.50000	.05948	.05972	.41878	2.01359
GRADIENT		-.00096	.00016	.00048	-.00009	.00074	.00000	.00022	.00006	-.00009	-.00253

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A 0 C M F M V NDM, RN/L

(REJ032) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 IN. FT.    XREF = 32.3010 IN.  
 LREF = 14.2440 IN.    YREF = 10000 IN.  
 BREF = 20.1004 IN.    ZREF = 11.2900 IN.  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

ALPHA = 0.000    ELEWOM = 0.000  
 AIRLON = 0.000    BDFLAP = -11.700  
 SPCBRK = 25.000    RUDDER = -25.000  
 ELEV-L = 0.000    ELEV-R = 0.000

RUN NO. 359/0    RN/L = 4.00    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.590	-4.943	-0.7180	.07500	.07510	-0.07170	.06580	479.70000	.03759	.03751	.03759	-0.35473
.596	-2.950	-0.7720	.07740	.07750	-0.07710	.06890	479.70000	.04024	.03726	.04024	-0.39464
.596	.019	-0.8530	.07930	.07930	-0.08520	.06980	479.70000	.04115	.03815	.04115	-0.37440
.601	3.101	-0.8670	.07930	.07850	-0.08590	.06670	479.70000	.03940	.03910	.03940	-0.39427
.599	5.117	-0.8530	.07710	.07720	-0.08520	.06580	479.70000	.03526	.04194	.03526	-1.10363
	6.712	-0.8140	.07600	.07610	-0.08130	.06440	479.70000	.03496	.04114	.03496	-1.05833
GRADIENT		-0.0183	.00040	.00042	-0.00183	.00009	-0.00000	.00021	.00022	.00020	-0.01807

RUN NO. 259/0    RN/L = 4.25    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.612	-4.964	-0.8430	.08070	.08080	-0.08420	.07750	646.20000	.04195	.03805	.04195	-1.14211
.799	-2.972	-0.9060	.08360	.08370	-0.09060	.08160	646.20000	.04513	.03857	.04513	-1.08249
.796	.000	-0.9620	.08440	.08460	-0.09610	.08340	646.20000	.04645	.03815	.04645	-1.13553
.796	.016	-0.9930	.08490	.08510	-0.09940	.08450	646.20000	.04733	.03767	.04733	-1.11611
.799	1.030	-0.9930	.08490	.08510	-0.09920	.08370	646.20000	.04623	.03807	.04623	-1.16569
.801	3.119	-0.9690	.08480	.08490	-0.09880	.08220	646.20000	.04472	.04018	.04472	-1.16372
.799	5.176	-0.9350	.08390	.08400	-0.09740	.07740	646.20000	.04235	.04165	.04235	-1.15359
	6.744	-0.9640	.08330	.08340	-0.09640	.07320	646.20000	.04091	.04249	.04091	-1.15585
GRADIENT		-0.0194	.00048	.00049	-0.00194	.00060	-0.00000	.00037	.00012	.00037	-0.01905

RUN NO. 356/0    RN/L = 3.75    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.611	-4.955	-0.7590	.09210	.09220	-0.07500	.08010	614.90000	.05349	.03671	.05349	-0.82210
.699	-2.975	-0.8100	.09390	.09400	-0.08170	.08520	614.90000	.05480	.03920	.05480	-0.86815
.912	.017	-0.9030	.09560	.09560	-0.09270	.08320	614.90000	.05562	.03670	.05562	-0.94156
.699	3.113	-0.9250	.09740	.09740	-0.09240	.08000	614.90000	.05576	.04064	.05576	-0.94167
.699	5.173	-0.9150	.09650	.09650	-0.09150	.08420	614.90000	.05347	.04310	.05347	-0.94019
.699	6.703	-0.9120	.09630	.09630	-0.09120	.08290	614.90000	.05245	.04345	.05245	-0.94714
GRADIENT		-0.0211	.00064	.00063	-0.00211	.00057	.00000	.00040	.00010	.00040	-0.02167



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOM. RN/L

(REJ032) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = .0000 ELEVON = .0000  
 ALLCON = .0000 BDFLAP = -11.7000  
 SPBRK = 25.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 253/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.053	-4.964	-.03410	.15870	.15870	-.03390	.07160	629.20000	.09861	.06009	.09861	-21361
1.053	-2.977	-.03720	.16160	.16170	-.03700	.07560	629.20000	.10158	.06012	.10158	-22882
1.054	-.985	-.04120	.16230	.16230	-.04100	.07900	629.20000	.10373	.05857	.10373	-25262
1.052	.010	-.04580	.16230	.16230	-.04560	.08020	629.20000	.10291	.05939	.10291	-28096
1.052	1.044	-.04600	.16200	.16210	-.04580	.08020	629.20000	.10349	.05861	.10349	-28254
1.050	3.104	-.04660	.16130	.16140	-.04640	.07780	629.20000	.10128	.06012	.10128	-28748
1.047	5.174	-.04620	.16020	.16020	-.04600	.07450	629.20000	.09908	.06112	.09908	-28714
1.050	6.689	-.04570	.16100	.16110	-.04560	.07470	629.20000	.09866	.06244	.09866	-28305
	GRADIENT	-.00174	.00029	.00030	-.00174	.00089	.00000	.00037	-.00007	.00037	-01034

RUN NO. 354/ 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.200	-4.955	-.01970	.16330	.16330	-.01960	.05590	572.70000	.10713	.05617	.10713	-12002
1.202	-2.971	-.02310	.16520	.16520	-.02290	.05920	572.70000	.10984	.05536	.10984	-13862
1.201	.011	-.02690	.16680	.16680	-.02680	.06180	572.70000	.11206	.05474	.11206	-16067
1.198	3.105	-.03020	.16880	.16880	-.03010	.06260	572.70000	.11200	.05680	.11200	-17832
1.199	5.173	-.03290	.16910	.16910	-.03280	.06210	572.70000	.11108	.05802	.11108	-19397
1.197	6.687	-.03410	.16750	.16750	-.03410	.06300	572.70000	.10952	.05798	.10952	-20358
	GRADIENT	-.00129	.00066	.00066	-.00129	.00081	.00000	.00060	.00006	.00060	-00718

ARC 11-747 QM53A B C H F W V NOM, RN/L

(REJ033) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 263/0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

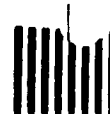
MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.601	-5.024	.41710	.19510	.03030	.42900	.06230	484.30000	-.00474	.03504	.06982	3.99687
.598	-3.068	.41400	.19370	.03140	.42610	.06260	484.30000	-.00375	.03515	.07030	3.94773
.597	-1.966	.40980	.19760	.03410	.42230	.06180	484.30000	-.00278	.03588	.07059	3.83453
.598	.017	.40890	.19790	.03450	.42150	.06200	484.30000	-.00225	.03675	.07098	3.81743
.598	1.034	.41220	.19670	.03470	.42490	.06110	484.30000	-.00360	.03530	.07024	3.82026
.598	3.052	.41060	.19680	.03510	.42340	.05960	484.30000	-.00368	.03878	.06990	3.80123
.599	5.074	.40970	.19650	.03310	.42200	.05640	484.30000	-.00633	.03943	.06704	3.87093
.599	7.099	.40780	.19610	.03300	.42010	.05520	484.30000	-.00929	.04229	.06380	3.86305
.600	9.125	.40720	.19700	.03410	.41960	.05710	484.30000	-.01017	.04427	.06285	3.82644
GRADIENT		-.00239	.00051	.00058	-.00027	-.00048	.00000	-.00003	.00051	-.00008	-.02249

RUN NO. 260/0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.797	-5.047	.42380	.13500	.05870	.44090	.06190	640.70000	.02357	.03513	.09978	3.15553
.796	-3.015	.42240	.13770	.06160	.43990	.06450	640.70000	.02465	.03695	.10066	3.08290
.801	-.991	.41450	.13870	.06390	.43230	.06510	640.70000	.02761	.03629	.10226	3.00467
.797	.019	.41120	.13780	.06370	.42940	.06610	640.70000	.02706	.03664	.10115	2.99810
.799	1.040	.41590	.13970	.06470	.43400	.06590	640.70000	.02645	.03825	.10142	2.99231
.799	3.063	.41130	.13910	.06500	.42930	.06430	640.70000	.02603	.03897	.10019	2.96977
.796	5.100	.41390	.13740	.06280	.43160	.06090	640.70000	.02155	.04125	.09617	3.02749
.797	7.127	.41410	.13680	.06220	.43160	.05950	640.70000	.02028	.04192	.09492	3.00430
.800	9.164	.41450	.13660	.06210	.43200	.05680	640.70000	.01808	.04402	.09282	3.04506
GRADIENT		-.00157	.00026	.00054	-.00148	.00001	-.00000	.00015	.00039	-.00011	-.00735

RUN NO. 357/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.901	-5.040	.42650	.16570	.08850	.44900	.05720	616.00000	.05165	.03685	.12884	2.56420
.901	-3.014	.42750	.16780	.09040	.45000	.05740	616.00000	.05208	.03832	.12943	2.55710
.899	.023	.41750	.16640	.09080	.44320	.05990	616.00000	.05239	.03841	.12804	2.51865
.900	3.068	.42260	.16830	.09180	.44560	.05720	616.00000	.05197	.03983	.12856	2.52742
.899	5.101	.41850	.16780	.09200	.44140	.05740	616.00000	.05035	.04165	.12624	2.50354
.900	7.132	.41720	.16740	.09190	.44000	.05730	616.00000	.04843	.04347	.12410	2.50051
GRADIENT		-.00077	.00008	.00023	-.00072	-.00003	.00000	-.00002	.00025	-.00014	-.00602



DATE 06 JUL 74

TABULATED SOURCE DATA - Q433A

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ARC 11-747 Q433A B C M F W V NM. RN/L

(REJ033) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. AMRP = 32.3010 IN.  
 LREF = 14.2440 IN. IMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BDCLAP = -11.700  
 SPDRK = 25.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 254 / 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.051	-5.044	.52110	.24260	.14770	.55550	.00170	628.70000	.08651	.06119	.18165	2.15533
1.051	-3.012	.52370	.24250	.14710	.55800	-.00180	628.70000	.08810	.05900	.18366	2.16734
1.053	-1.000	.52210	.24310	.14800	.55650	-.00470	628.70000	.08820	.05380	.18350	2.15501
1.052	.018	.52010	.24470	.14990	.55490	-.00420	628.70000	.08880	.06110	.18381	2.13313
1.052	1.028	.52630	.24720	.15120	.56150	-.00370	628.70000	.08890	.06230	.18505	2.13754
1.050	3.061	.52590	.24500	.14920	.56060	-.00280	628.70000	.08841	.05079	.18442	2.15333
1.049	5.087	.51910	.24510	.15050	.55400	.00010	628.70000	.08719	.06331	.18206	2.12528
1.048	7.117	.51440	.24270	.14900	.54890	.00510	628.70000	.08332	.05503	.17797	2.12635
1.050	9.149	.51340	.24230	.14880	.54780	.00720	628.70000	.08325	.06555	.17711	2.12543
	GRADIENT	.00053	.00057	.00047	.00063	-.00010	-.00000	.00008	.00039	.00019	-.00023

RUN NO. 251 / 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.199	-5.035	.51670	.24390	.14990	.55140	-.01900	569.50000	.09240	.15750	.18675	2.12429
1.200	-3.011	.51650	.24360	.14960	.55110	-.01980	569.50000	.09274	.05686	.18703	2.12633
1.201	-.991	.51600	.24510	.15110	.55090	-.02160	569.50000	.09346	.05764	.18770	2.11191
1.204	.016	.51520	.24570	.15190	.55020	-.02260	569.50000	.09440	.05750	.18851	2.10279
1.204	1.029	.51890	.24710	.15260	.55410	-.02390	569.50000	.09426	.05834	.18905	2.10622
1.203	3.034	.51620	.24750	.15350	.55150	-.02250	569.50000	.09440	.05910	.18873	2.09151
1.200	5.084	.51100	.24630	.15320	.54620	-.01900	569.50000	.09422	.05896	.18764	2.08083
1.196	7.112	.50390	.24420	.15250	.53880	-.01470	569.50000	.09290	.06050	.18416	2.06424
1.196	9.135	.50300	.24370	.15220	.53780	-.01320	569.50000	.09178	.06042	.18378	2.06444
	GRADIENT	.00010	.00068	.00065	.00022	-.00051	-.00000	.00023	.00037	.00032	-.00045

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NDM. RN/L

(REJ034) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

20.000 ELEVDM = 1000  
 1000 BDFLAR = -11.740  
 20.000 BDFSER = -20.000  
 1000 ELEVDM = 1000

RUN NO. 380/0 RN/L = 3.96 GRADIENT INTERVAL = -5.000/ 5.000

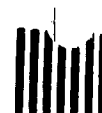
MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	COF	L/D
.597	-5.013	.91160	.35030	.02150	.97920	.03840	476.50000	.04416	.33371	2.57246
.599	-2.0398	.91060	.36210	.02510	.97980	.03860	476.50000	.04417	.33653	2.54260
.599	.012	.91400	.36590	.02750	.98420	.03850	476.50000	.04456	.32156	2.52565
.597	3.0756	.90820	.35320	.02330	.97640	.03720	476.50000	.04316	.31473	2.55449
.597	5.0081	.90320	.33260	.01910	.96340	.03760	476.50000	.04433	.30724	2.58769
.598	7.116	.90220	.35720	.01720	.96780	.03480	476.50000	.04496	.30163	2.53761
GRADIENT	-1.00043	-1.00047	-1.00027	-1.00057	-1.00023	-1.00000	-1.00000	-1.00015	-1.00131	-1.00131

RUN NO. 261/0 RN/L = 4.23 GRADIENT INTERVAL = -5.000/ 5.000

MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	COF	L/D
.793	-5.060	.85100	.38410	.06580	.93140	.05520	642.10000	.04714	.33619	2.24472
.797	-3.022	.84330	.38590	.07610	.92470	.06260	642.10000	.05122	.33435	2.21113
.799	-1.965	.83620	.38690	.07280	.92030	.06370	642.10000	.05134	.33522	2.19177
.798	.022	.83650	.38590	.07250	.91830	.06300	642.10000	.04353	.33566	2.19204
.799	1.046	.83810	.38660	.07260	.92010	.06270	642.10000	.04492	.33634	2.19313
.798	3.091	.83470	.38150	.06920	.91510	.06200	642.10000	.04744	.33343	2.01021
.798	5.131	.83310	.37540	.06400	.91150	.05540	642.10000	.04527	.32315	2.24431
.798	7.173	.83300	.37660	.05980	.90980	.05770	642.10000	.04676	.32418	2.27134
.799	9.226	.83350	.36520	.05460	.90830	.05470	642.10000	.04411	.31676	2.31644
GRADIENT	-1.00127	-1.00065	-1.00014	-1.00042	-1.00014	-1.00000	-1.00000	-1.00048	-1.00017	-1.00123

RUN NO. 358/0 RN/L = 3.75 GRADIENT INTERVAL = -5.000/ 5.000

MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	COF	L/D
.902	-5.071	.83240	.40810	.09530	.90210	.06050	616.30000	.05569	.35241	2.05316
.900	-3.035	.83690	.41360	.09890	.90830	.05540	616.30000	.05655	.35730	2.14234
.901	.017	.84190	.41550	.09480	.91370	.05250	616.30000	.05324	.36216	2.14265
.903	3.086	.84020	.41100	.09330	.91040	.05280	616.30000	.05137	.35951	2.15415
.902	5.129	.83680	.40520	.09110	.90530	.05340	616.30000	.05153	.35365	2.08452
.899	7.181	.83790	.39970	.08510	.90240	.05360	616.30000	.05151	.34763	2.11132
GRADIENT	-1.00054	-1.00043	-1.00059	-1.00034	-1.00000	-1.00000	-1.00000	-1.00026	-1.00036	-1.00147



DATE 06 JUL 74 TABULATED SOURCE DATA - 0453A

(REJ034) (03 APR 74)

ARC 11-747 0453A B C M F W V NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .03000 SCALE

PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
ATLRON = .000 BDFLAP = -11.700  
SPDRK = 25.000 RUDDER = -25.000  
ELEV-L = .000 ELEV-R = .000

RUN NO. 255/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.050	-5.050	1.00800	.51400	.13300	1.12400	-.03470	628.40000	.06322	.07058	.44384	1.98065
1.053	-3.024	1.00600	.51720	.13760	1.12300	-.03750	628.40000	.06651	.07109	.44659	1.96383
1.050	-1.004	1.02400	.52460	.13800	1.14300	-.04480	628.40000	.06587	.07213	.45282	1.97245
1.052	.015	1.01900	.52320	.13870	1.13700	-.04170	628.40000	.06826	.07044	.45302	1.96643
1.050	1.036	1.01700	.52340	.13960	1.13500	-.03880	628.40000	.06768	.07192	.45179	1.96160
1.047	3.072	1.00400	.51870	.13970	1.12100	-.03150	628.40000	.06789	.07181	.44720	1.95387
1.046	5.115	.99300	.50950	.13500	1.10800	-.02620	628.40000	.06679	.06821	.44172	1.96713
1.058	7.158	.98020	.50120	.13180	1.09300	-.02440	628.40000	.06610	.06570	.43594	1.97317
1.050	9.198	.97700	.49810	.13030	1.08900	-.02220	628.40000	.06181	.06849	.43055	1.97769
GRADIENT		-.00065	.00016	.00039	-.00070	.00118	.00000	.00029	.00010	.00004	-.00201

RUN NO. 355/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.199	-5.041	.96440	.49880	.13580	1.07700	-.05150	573.10000	.07166	.06414	.43569	1.94691
1.201	-3.020	.97040	.50380	.13830	1.08500	-.05540	573.10000	.07288	.06542	.43958	1.94045
1.197	.014	.97380	.50850	.14140	1.08900	-.05540	573.10000	.07435	.06705	.44232	1.92935
1.197	3.074	.96710	.50640	.14190	1.08200	-.05190	573.10000	.07515	.06675	.44068	1.92332
1.198	5.111	.95740	.49740	.13690	1.07000	-.04810	573.10000	.07424	.06266	.43572	1.93821
1.198	7.152	.94800	.48920	.13270	1.05900	-.04650	573.10000	.07210	.06160	.42995	1.95062
GRADIENT		-.00054	.00043	.00059	-.00049	.00058	.00000	.00037	.00022	.00018	-.00281

ARC 11-747 0453A B C M F W Y NOM. RN/L

(REJ035) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1024 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SFDGRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 277/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.596	-4.934	-.08790	.08010	.08020	-.08780	.07040	477.90000	.04178	.03842	.04178	-1.09476
.598	-2.953	-.09490	.08280	.08290	-.09480	.07350	477.90000	.04176	.04114	.04176	-1.14355
.601	-.964	-.09920	.08370	.08380	-.09910	.07460	477.90000	.04344	.04036	.04344	-1.18258
.598	.022	-.09990	.08360	.08420	-.09980	.07430	477.90000	.04383	.04307	.04383	-1.18951
.598	1.058	-.09990	.08360	.08420	-.09980	.07440	477.90000	.04413	.04387	.04413	-1.18810
.595	3.178	-.10260	.08360	.08370	-.10260	.07270	477.90000	.04202	.04168	.04202	-1.20151
.597	5.164	-.09650	.08250	.08260	-.09640	.07050	477.90000	.04241	.04219	.04241	-1.16707
.597	6.703	-.09570	.08110	.08110	-.09560	.06940	477.90000	.03701	.04409	.03701	-1.17879
GRADIENT		-.00155	.00041	.00041	-.00156	.00029	.00000	.00016	.00025	.00016	-.01315

RUN NO. 274/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.800	-4.934	-.09700	.08410	.08420	-.09690	.08160	639.60000	.04445	.03975	.04445	-1.15483
.795	-2.961	-.10240	.08650	.08670	-.10230	.08520	639.60000	.04538	.04132	.04538	-1.17531
.797	-.972	-.10830	.08830	.08840	-.10820	.08740	639.60000	.04670	.04170	.04670	-1.22338
.798	.025	-.10960	.08850	.08860	-.10950	.08770	639.60000	.04800	.04160	.04800	-1.23583
.793	1.058	-.10920	.08850	.08860	-.10910	.08730	639.60000	.04726	.04134	.04726	-1.23138
.800	3.121	-.10990	.08840	.08850	-.10980	.08620	639.60000	.04667	.04183	.04667	-1.24368
.799	5.180	-.10830	.08780	.08790	-.10830	.08350	639.60000	.04482	.04308	.04482	-1.23218
.797	6.733	-.10460	.08620	.08630	-.10460	.08180	639.60000	.04213	.04417	.04213	-1.21205
GRADIENT		-.00166	.00054	.00053	-.00166	.00059	.00000	.00034	.00019	.00034	-.01181

RUN NO. 271/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.901	-4.934	-.08780	.09640	.09640	-.08780	.08480	615.40000	.05450	.04190	.05450	-1.31079
.902	-2.961	-.09420	.09840	.09850	-.09420	.09480	615.40000	.05715	.04135	.05715	-1.39635
.902	-.972	-.09980	.10000	.10000	-.09970	.09810	615.40000	.05820	.04180	.05820	-1.39700
.901	.024	-.10420	.09950	.09960	-.10410	.09530	615.40000	.05855	.04105	.05855	-1.40451
.899	1.058	-.10400	.10020	.10020	-.10390	.09560	615.40000	.05923	.04097	.05923	-1.40363
.900	3.117	-.10320	.09990	.10000	-.10320	.09280	615.40000	.05685	.04315	.05685	-1.41200
.900	5.175	-.10220	.09990	.10000	-.10220	.08910	615.40000	.05540	.04450	.05540	-1.42132
.900	6.658	-.10090	.10010	.10010	-.10080	.08750	615.40000	.05463	.04547	.05463	-1.43069
GRADIENT		-.00210	.00044	.00044	-.00209	.00108	.00000	.00035	.00009	.00035	-.01583





DATE 16 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NMM, RN/L

(REJ035) (03 APR 74)

## REFERENCE DATA

SPEF = 2.4210 SQ.FT. RMGP = 32.3010 IN.  
 LREF = 14.2440 IN. RMGP = 10.0000 IN.  
 BREF = 28.1004 IN. ZMGP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA =  
 ALLORN =  
 SPDRPK =  
 ELEV-L =

.0000 ELEMN = .0000  
 .0000 BOFLAP = -11.7000  
 55.0000 RUDDER = -10.0000  
 .0000 ELEV-H = .0000

## PARAMETRIC DATA

RUN NO. 266/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
1.051	-4.953	-.03810	.15950	.15360	-.03790	.07220	628.70000	.03725	.06235	.03725	-.23747
1.054	-2.963	-.03360	.16020	.16100	-.03930	.07410	628.70000	.03930	.06102	.03930	-.24547
1.055	-.970	-.04460	.16060	.16060	-.04450	.07810	628.70000	.10204	.05856	.10204	-.27709
1.053	.024	-.04340	.16150	.16150	-.04310	.07960	628.70000	.10258	.05832	.10258	-.30432
1.050	1.058	-.05060	.15930	.16000	-.05050	.07900	628.70000	.10143	.05857	.10143	-.31582
1.050	3.116	-.05010	.16130	.16110	-.04960	.07730	628.70000	.10067	.06043	.10067	-.33312
1.050	5.179	-.05020	.16170	.16160	-.04960	.07540	628.70000	.10011	.06169	.10011	-.33779
1.051	6.828	-.05030	.16180	.16180	-.05010	.07520	628.70000	.09940	.06240	.09940	-.30364
	GRADIENT	-.05010	.00017	.00016	-.00179	.00006	-.00000	.00049	-.00000	.00049	-.00131

RUN NO. 265/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
1.200	-4.947	-.02430	.16730	.16730	-.02410	.06010	571.00000	.10320	.05810	.10320	-.14435
1.197	-2.960	-.02760	.16780	.16780	-.02730	.06380	571.00000	.11153	.05627	.11153	-.16289
1.199	-.972	-.03150	.16770	.16780	-.03120	.06540	571.00000	.11324	.05456	.11324	-.18594
1.198	.025	-.03460	.16820	.16830	-.03440	.06580	571.00000	.11349	.05461	.11349	-.20420
1.199	1.038	-.03350	.16870	.16870	-.03320	.06550	571.00000	.11414	.05456	.11414	-.19680
1.199	3.111	-.03590	.16120	.17000	-.03570	.06540	571.00000	.11342	.05658	.11342	-.21030
1.199	5.175	-.03790	.15970	.16970	-.03770	.06480	571.00000	.11341	.05609	.11341	-.22216
1.200	6.743	-.03540	.16460	.16860	-.03320	.06520	571.00000	.11164	.05636	.11164	-.23350
	GRADIENT	-.00150	.00030	.00031	-.00150	.00064	-.00000	.00056	-.00025	.00056	-.00056

ARC 11-747 0A53A B C M F M V NOM. RN/L

(REJ036) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 278/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-5.032	.40530	.10820	.03550	.41800	.06650	478.50000	-.00304	.03854	.06959	3.77036
.599	-2.995	.40250	.10950	.03720	.41550	.06700	478.50000	-.00154	.03874	.07063	3.70203
.596	-.985	.39780	.10960	.03820	.41090	.06660	478.50000	.00013	.03807	.07146	3.65255
.597	.026	.39580	.10970	.03870	.40890	.06620	478.50000	.00019	.03851	.07119	3.62884
.598	1.034	.40100	.11080	.03880	.41420	.06550	478.50000	.00041	.03839	.07233	3.64251
.599	3.056	.39770	.11080	.03940	.41090	.06460	478.50000	-.00130	.04070	.07007	3.61147
.593	5.083	.39850	.11000	.03850	.41160	.06230	478.50000	-.00285	.04135	.06467	3.64445
.598	7.105	.39890	.10800	.03650	.41170	.05840	478.50000	-.00646	.04296	.06513	3.71482
.596	9.124	.39960	.10730	.03580	.41220	.05740	478.50000	-.00983	.04563	.06190	3.74152
GRADIENT		-.00255	.00025	.00036	-.00052	-.00041	.00000	.00005	.00031	-.00004	-.00136

RUN NO. 275/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.799	-5.038	.41730	.14010	.06490	.43340	.06600	639.10000	.02532	.03898	.10114	2.99250
.798	-3.059	.41250	.14060	.06620	.43070	.06810	639.10000	.02794	.03826	.10231	2.94791
.800	-.986	.40590	.13990	.06660	.42420	.06930	639.10000	.02822	.03838	.10146	2.91639
.800	.027	.40210	.14030	.06840	.42060	.07050	639.10000	.02965	.03875	.10223	2.86567
.800	1.048	.40620	.14040	.06710	.42450	.06960	639.10000	.02782	.03928	.10112	2.90712
.797	3.073	.40390	.14120	.06830	.42230	.06820	639.10000	.02793	.04037	.10084	2.87369
.800	5.111	.40160	.14050	.06810	.42000	.06720	639.10000	.02538	.04272	.09793	2.87000
.798	7.137	.40490	.13840	.06550	.42280	.06310	639.10000	.02413	.04137	.09719	2.93643
.796	9.166	.41060	.13710	.06330	.42820	.05690	639.10000	.01746	.04584	.09155	3.00243
GRADIENT		-.00126	.00011	.00034	-.00123	.00003	-.00000	-.00002	.00036	-.00023	-.00145

RUN NO. 272/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.902	-5.032	.41810	.16970	.09390	.44130	.06090	615.40000	.05386	.04004	.12967	2.47356
.899	-3.079	.41570	.16930	.09390	.43890	.06270	615.40000	.05449	.03941	.12988	2.46566
.898	-.984	.41010	.16910	.09470	.43340	.06390	615.40000	.05626	.03844	.13066	2.43514
.898	.025	.40960	.16980	.09550	.43300	.06330	615.40000	.05469	.04001	.12905	2.42166
.899	1.043	.41320	.17100	.09600	.43680	.06340	615.40000	.05611	.03989	.13111	2.42673
.900	3.078	.41250	.17050	.09560	.43600	.06170	615.40000	.05599	.03961	.13085	2.43112
.898	5.105	.40690	.16970	.09590	.43030	.06280	615.40000	.05318	.04272	.12719	2.47661
.900	7.136	.40840	.16860	.09460	.43150	.05900	615.40000	.05162	.04398	.12478	2.43132
.898	9.169	.40990	.16780	.09360	.43290	.05410	615.40000	.04731	.04629	.12176	2.45137
GRADIENT		-.00032	.00027	.00032	-.00026	-.00017	-.00000	.00021	.00010	.00017	-.00566



DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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(REJ036) (03 APR 74)

## REFERENCE DATA

SREF = 2.4230 SJ.FT. ZREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1074 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BOFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 266/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
1.051	-5.028	.51880	.24360	.14860	.55350	-.00130	629.20000	.08310	.06550	.17795	2.14177
1.053	-3.009	.52330	.24340	.14760	.55800	-.00400	629.20000	.08533	.06227	.18093	2.16256
1.055	-0.989	.51790	.24320	.14840	.55250	-.00460	629.20000	.08619	.06221	.18082	2.14113
1.052	.023	.52130	.24560	.15010	.55630	-.00590	629.20000	.08688	.06322	.18216	2.13478
1.053	1.032	.52470	.24590	.14900	.55370	-.00370	629.20000	.08722	.06238	.18309	2.14611
1.053	3.069	.52140	.24640	.15090	.55660	-.00580	629.20000	.08888	.06202	.18418	2.12811
1.052	5.085	.51570	.24540	.15140	.55090	-.00180	629.20000	.08724	.06416	.18157	2.10915
1.050	7.112	.51010	.24480	.15140	.54520	.00440	629.20000	.08569	.06571	.17906	2.09468
1.049	9.140	.51250	.24290	.14910	.54720	.00460	629.20000	.08258	.06652	.17635	2.12109
	GRADIENT	.00005	.00058	.00056	.00015	-.00032	-.00000	.00058	-.00002	.00059	-.00486

RUN NO. 266/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	COF	L/D
1.200	-5.028	.51560	.24520	.15080	.55060	-.02120	571.00000	.08989	.06791	.18414	2.11332
1.201	-3.013	.51410	.24380	.14970	.54900	-.02130	571.00000	.09150	.05820	.18544	2.12087
1.198	-.987	.51330	.24450	.15050	.54820	-.02170	571.00000	.09243	.05807	.18622	2.11061
1.201	.026	.51310	.24520	.15120	.54820	-.02220	571.00000	.09345	.05775	.18722	2.10415
1.201	1.041	.51840	.24690	.15200	.55370	-.02310	571.00000	.09399	.05801	.18871	2.11070
1.202	3.063	.51320	.24730	.15330	.54870	-.02320	571.00000	.09333	.05597	.18719	2.08625
1.198	5.088	.51040	.24680	.15330	.54580	-.02100	571.00000	.09303	.06027	.18640	2.07691
1.197	7.117	.50220	.24580	.15380	.53760	-.01580	571.00000	.09306	.06074	.18500	2.05348
1.197	9.146	.49930	.24460	.15320	.53450	-.01410	571.00000	.09140	.06180	.18283	2.05089
	GRADIENT	.00012	.00084	.00061	.00023	-.00035	-.00000	.00035	.00026	.00038	-.00500

ARC 11-747 QM53A B C M F W V NOM. RN/L

(REJ037) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1024 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 279 / 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	CDF	L/D
.598	-5.007	.89630	.35860	.02680	.96500	.04260	.01945	.04625	.31177	2.52690
.597	-2.994	.89880	.36210	.02920	.96850	.04230	.01852	.04772	.31384	2.50946
.596	-1.982	.89860	.36460	.03150	.96930	.04160	.01551	.04701	.31695	2.49244
.597	.024	.89110	.36590	.03180	.97200	.04100	.01572	.04752	.31767	2.49087
.598	1.037	.89660	.36450	.03150	.96920	.04130	.01497	.04647	.31742	2.49241
.597	3.070	.89420	.35940	.02830	.96330	.04230	.01802	.04632	.31254	2.51509
.599	5.092	.88410	.35290	.02570	.95150	.04570	.01967	.04537	.30695	2.53253
.598	7.122	.88500	.35080	.02370	.95170	.04020	.02536	.04906	.30167	2.54821
.597	9.144	.89440	.34910	.01940	.96000	.02960	.03118	.05018	.29904	2.58701
GRADIENT		-.00169	-.00241	-.00014	-.00078	-.00001	.00000	-.00002	-.00017	.00005

RUN NO. 276 / 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	CDF	L/D
.799	-5.053	.84390	.38130	.06590	.92370	.06350	.01903	.04687	.33380	2.23754
.801	-3.015	.83740	.38500	.07160	.91890	.06410	.02215	.04945	.33509	2.19883
.798	-.982	.83530	.38740	.07460	.91770	.06440	.02212	.05248	.33466	2.17943
.802	.030	.83010	.38600	.07510	.91240	.06530	.02369	.05141	.33432	2.17361
.798	1.054	.82990	.38610	.07530	.91230	.06530	.02366	.05164	.33426	2.17232
.799	3.093	.82810	.38330	.07330	.90960	.06470	.02461	.04869	.33423	2.18346
.799	5.137	.82760	.37800	.06870	.90720	.06240	.01991	.04879	.32899	2.21160
.802	7.175	.82330	.37280	.06540	.90140	.05830	.01696	.04844	.32424	2.23031
.800	9.219	.82410	.36390	.05710	.89910	.05490	.02622	.05088	.31336	2.28521
GRADIENT		-.00163	-.00231	.00028	-.00163	.00013	.00004	-.00015	-.00015	.00001

RUN NO. 273 / 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	CAF	CAB	CDF	L/D
.901	-5.058	.81830	.40420	.09630	.90760	.06490	.04406	.05224	.35182	2.054517
.899	-3.023	.83060	.41050	.09790	.92130	.05860	.04467	.05323	.35708	2.044358
.902	-.987	.83320	.41410	.10200	.92500	.05650	.04556	.05464	.35319	2.033364
.899	.030	.83050	.41400	.10120	.92250	.05660	.04629	.05491	.35901	2.02687
.898	1.056	.82500	.41060	.09990	.91610	.05800	.04558	.05432	.35815	2.03017
.900	3.099	.82220	.40800	.09860	.91260	.05720	.04500	.05392	.35411	2.033527
.897	5.137	.81780	.40590	.09360	.90600	.05650	.03827	.05533	.34583	2.05357
.894	7.182	.82230	.39590	.08750	.90840	.05510	.02747	.05503	.34120	2.09636
.902	9.226	.82200	.39020	.08230	.90620	.05220	.02988	.05242	.33702	2.12614
GRADIENT		-.00164	-.00249	.00009	-.00172	-.00013	.00000	-.00003	-.00059	.00001



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ037) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. DNEP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 275 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMF/D	q	CAF	CAB	CDP	L/C
1.031	-5.045	1.00100	.51340	.13560	1.11620	-.03220	628.60000	.06403	.07157	.44187	1.96874
1.049	-3.015	1.00400	.51700	.13770	1.12100	-.03760	628.60000	.06509	.07261	.44457	1.96236
1.052	-.994	1.01900	.52140	.13670	1.13600	-.04600	628.60000	.06505	.07165	.44966	1.97438
1.049	.022	1.01600	.52160	.13770	1.13400	-.04190	628.60000	.06515	.07255	.44907	1.96911
1.049	1.045	1.01100	.52130	.13920	1.12900	-.03950	628.60000	.06600	.07320	.44816	1.96017
1.047	3.081	.99670	.51660	.14000	1.11400	-.03090	628.60000	.06677	.07323	.44376	1.94888
1.048	5.123	.99080	.51050	.13650	1.11600	-.02870	628.60000	.06593	.07057	.44023	1.95959
1.048	7.157	.97860	.50110	.13200	1.09200	-.02380	628.60000	.06164	.07036	.43141	1.97175
1.045	9.201	.97330	.49740	.13070	1.08500	-.02300	628.60000	.06043	.07027	.42788	1.97377
	GRADIENT	-.00148	-.00207	.00246	-.00139	.00131	-.00000	.00000	.00017	-.00020	-.00270

RUN NO. 267 / 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMF/D	q	CAF	CAB	CDP	L/C
1.199	-5.033	.95790	.49940	.13690	1.07200	-.05250	570.10000	.07091	.06599	.43328	1.93933
1.203	-3.019	.96290	.50280	.13830	1.07700	-.05760	570.10000	.07016	.06814	.43428	1.93602
1.198	-.998	.96410	.50370	.13870	1.07900	-.05590	570.10000	.07078	.06792	.43555	1.93540
1.197	.018	.96600	.50520	.13940	1.08100	-.05710	570.10000	.07203	.06737	.43741	1.93349
1.195	1.044	.96410	.50550	.14040	1.08000	-.05660	570.10000	.07254	.06786	.43755	1.92863
1.192	3.077	.95810	.50380	.14100	1.07300	-.05150	570.10000	.07348	.06752	.43603	1.92211
1.194	5.111	.94570	.49450	.13660	1.05800	-.04450	570.10000	.07238	.06422	.42987	1.93276
1.198	7.145	.94280	.48890	.13260	1.05400	-.04800	570.10000	.07031	.06229	.42656	1.94826
1.200	9.188	.93850	.48410	.12980	1.04800	-.04610	570.10000	.06947	.06033	.42372	1.95751
	GRADIENT	-.00071	.00024	.00048	-.00054	.00087	.00000	.00058	-.00009	.00036	-.00239

ARC 11-747 Q453A B C M F M V NOM. RN/L

(REJ538) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. DMRF = 32.3010 IN.  
 LREF = 14.2440 IN. TMRF = .0000 IN.  
 BREF = 24.1004 IN. ZMRF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

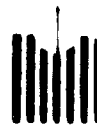
BETA = .0000 ELEVOM = .0000  
 AILDOM = .0000 BDFLAP = -11.7000  
 SPDBRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 251/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.594	-.651	-.15570	.10720	.10540	-.15700	.10220	479.70000	.05789	.04751	.05967	-1.45358
.600	-.591	-.12360	.10470	.10490	-.12340	.10050	479.70000	.05786	.04754	.05766	-1.18015
.600	3.008	.01650	.10270	.09960	.02190	.09960	479.70000	.05427	.04533	.05538	.16399
.597	6.085	.16210	.10470	.08690	.17230	.09780	479.70000	.04271	.04419	.06074	1.54877
.596	9.034	.31790	.11860	.06690	.33260	.09290	479.70000	.02203	.04487	.07433	2.67934
.601	12.120	.47340	.14880	.04560	.49610	.09100	479.70000	.00233	.04327	.10000	3.19654
.598	15.180	.62290	.22070	.04980	.65890	.08240	479.70000	.00314	.04666	.17556	2.82356
.596	18.260	.77030	.35670	.05000	.82760	.07620	479.70000	.00369	.04836	.28027	2.51067
.597	21.240	.91240	.49100	.05070	.99860	.06930	479.70000	-.00113	.05439	.35033	2.23167
.598	24.260	.98960	.49700	.04650	1.10600	.09200	479.70000	-.00113	.05763	.44428	1.93100
.598	27.230	.95680	.53390	.04260	1.09800	.15130	479.70000	-.02371	.06631	.48098	1.77241
GRADIENT		.04625	-.00162	-.00161	.04803	-.00220	.00000	-.00303	-.00058	-.00104	.43715

RUN NO. 197/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.738	-.656	-.16990	.11090	.10890	-.17110	.11710	638.10000	.06418	.04472	.06613	-1.53215
.798	.102	-.13530	.10810	.10830	-.13510	.11640	638.10000	.06342	.04488	.06318	-1.25201
.799	3.085	.01570	.10520	.10420	.02130	.11470	638.10000	.05673	.04547	.05979	.14888
.800	6.085	.17460	.11190	.09290	.18540	.10780	638.10000	.04908	.04382	.06839	1.55889
.800	9.084	.33260	.14130	.08700	.35080	.09830	638.10000	.04394	.04306	.09878	2.35441
.801	12.110	.46160	.19020	.08910	.49120	.09750	638.10000	.04451	.04459	.14657	2.42724
.802	15.190	.59460	.25910	.09430	.64170	.08770	638.10000	.04697	.04733	.21347	2.29437
.799	18.230	.73630	.34290	.09530	.80660	.08430	638.10000	.04242	.05288	.29262	2.14761
.799	21.240	.83510	.42290	.09150	.93160	.09340	638.10000	.03518	.05632	.37029	1.97542
.796	24.240	.87620	.49150	.08840	1.00100	.14660	638.10000	.02206	.06034	.43109	1.78294
.800	27.200	.85640	.54480	.09220	1.01200	.18730	638.10000	.01586	.07634	.47669	1.57540
GRADIENT		.04990	-.00137	-.00129	.05171	-.00262	.00000	-.00149	.00020	-.00154	.45508



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ038) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BET% = .000 ELEVON = .000  
 ALROM = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 193/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.903	-.651	-.17270	.12290	.12590	-.17410	.13250	617.60000	.07433	.04637	.07651	-1.40565
.904	-.100	-.13110	.12060	.12090	-.13090	.12940	617.60000	.07513	.04577	.07490	-1.08650
.905	3.116	.03780	.11930	.11790	.04420	.11690	617.60000	.07382	.04318	.1	.612
.901	6.121	.11910	.13640	.11520	.04490	.10750	617.60000	.07251	.04269	.09395	1.40367
.902	9.128	.34590	.17190	.11400	.36880	.09420	617.60000	.07276	.04204	.13034	2.01287
.900	12.150	.48070	.22030	.11430	.51630	.08510	617.60000	.07031	.04399	.17740	2.18087
.897	15.180	.61430	.26980	.11800	.66870	.07220	617.60000	.06874	.05026	.24144	2.11992
.902	18.240	.74500	.37160	.12030	.82290	.07310	617.60000	.06538	.05492	.31918	1.99590
.899	21.230	.82860	.44310	.11860	.93500	.05260	617.60000	.05778	.06082	.39243	1.84491
.897	24.330	.86770	.52290	.11910	1.00690	.14860	617.60000	.04374	.07536	.45432	1.65891
.899	27.220	.89640	.58750	.11240	1.06600	.17640	617.60000	.03319	.07921	.51711	1.52589
GRADIENT	.05591	-.00081	-.00011	-.00111	.05798	-.00414	.00000	-.00026	-.00005	.00004	.45952

RUN NO. 189/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.054	-.619	-.10540	.17980	.17870	-.10730	.11540	629.90000	.11944	.05926	.12059	-.58585
1.050	.089	-.06520	.17550	.17550	-.06500	.10610	629.90000	.11879	.05671	.11871	-.37174
1.051	3.076	.12740	.18210	.17500	.13700	.06960	629.90000	.11674	.05826	.12393	.69968
1.053	6.051	.30280	.20570	.17260	.32280	.03720	629.90000	.11337	.05923	.14676	1.47233
1.049	9.001	.45540	.23910	.16420	.48740	.02360	629.90000	.10491	.05929	.18052	1.90479
1.051	12.100	.60100	.29440	.16190	.64930	.01460	629.90000	.09858	.06332	.23250	2.04117
1.050	15.160	.74890	.36990	.16130	.81920	.00530	629.90000	.09436	.06694	.30531	2.02343
1.052	18.230	.89340	.46080	.15630	.99840	-.00540	629.90000	.08668	.06962	.39467	1.95186
1.048	21.230	1.01670	.55990	.15380	1.15740	-.00390	629.90000	.07937	.07443	.49341	1.81543
1.048	24.240	1.06190	.64770	.15520	1.23300	.03350	629.90000	.07307	.08213	.57285	1.63735
1.050	27.210	1.07400	.72260	.15160	1.28690	.06700	629.90000	.06533	.08627	.64613	1.48629
GRADIENT	.06332	.00110	-.00275	-.00275	.06644	-.01232	.00000	-.00072	-.00003	.00115	.35045

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TABULATED SOURCE DATA - OAS3A

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ARC 11-747 OAS3A B C M F W V NOM. RN/L

(REJ38) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3510 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2300 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILERON = .000 SDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 105/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	C <sub>y</sub>	CLMFLD	Q	CAF	CAB	CDF	L/D
1.202	-0.627	-0.9210	.10900	.18800	-.59420	.10800	570.50000	.13300	.05380	.13602	-1.48336
1.201	-0.69	-0.95400	.10810	.18810	-.05380	.09800	570.50000	.13391	.05419	.13385	-1.28732
1.205	3.061	.12390	.19070	.18300	.13390	.05610	570.50000	.12920	.05460	.13616	.64972
1.203	5.054	.23820	.20160	.18000	.25310	.03370	570.50000	.12472	.05528	.14653	1.17194
1.198	6.048	.29270	.20970	.17770	.31270	.02480	570.50000	.12202	.05568	.15428	1.39388
1.197	9.065	.44590	.24290	.16360	.47800	.00710	570.50000	.11254	.05706	.18654	1.80583
1.195	12.060	.59040	.29370	.16370	.63880	-.00220	570.50000	.10409	.05961	.23547	2.00976
1.197	15.160	.74280	.36870	.16160	.81340	-.01870	570.50000	.09870	.06290	.30798	2.01477
1.199	18.220	.88010	.45600	.15870	.97850	-.03190	570.50000	.09278	.06522	.39407	1.92982
1.196	21.210	.97180	.54360	.15520	1.10390	-.02290	570.50000	.08645	.06875	.47965	1.76787
1.195	24.260	1.04100	.63560	.15190	1.21100	-.00420	570.50000	.07816	.07334	.56883	1.62885
1.196	27.170	1.10100	.72650	.14360	1.31190	.00700	570.50000	.06782	.07578	.63898	1.51537
GRADIENT		.05884	.00243	-.00138	.06212	-.01405	.00000	-.00357	.00019	.00026	.3.141





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## TABULATED SOURCE DATA - QAS3A

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ARC 11-1.7 QAS3A B C M F W V NOM. RN/L

(REJ039) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 345/0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.599	-4.936	-.09780	.10050	.10070	-.09780	.09180	481.40000	.05421	.04649	.05421	-.96922
.598	-2.945	-.10260	.10290	.10310	-.10240	.09480	481.40000	.05651	.04659	.05651	-.99321
.597	.030	-.11230	.10390	.10410	-.11210	.09670	481.40000	.05763	.04647	.05763	-1.07685
.597	3.111	-.11160	.10430	.10450	-.11140	.09560	481.40000	.05670	.04780	.05670	-1.06603
.598	5.168	-.10860	.10240	.10260	-.10840	.09220	481.40000	.05131	.05129	.05131	-1.05653
.600	6.800	-.10360	.09860	.09880	-.10350	.08810	481.40000	.04988	.04892	.04988	-1.04757
	GRADIENT	-.00185	.00044	.00044	-.00185	.00046	-.00000	.00029	.00015	.00029	-.01360

RUN NO. 198/0 RN/L = 4.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.800	-4.947	-.12240	.10580	.10600	-.12230	.11060	640.80000	.05965	.04635	.05965	-1.15377
.800	-2.959	-.12770	.10790	.10810	-.12750	.11500	640.80000	.06268	.04542	.06268	-1.17946
.797	-.972	-.13280	.10840	.10860	-.13260	.11640	640.80000	.06288	.04572	.06288	-1.22039
.797	.029	-.13650	.10870	.10890	-.13630	.11750	640.80000	.06307	.04583	.06307	-1.25154
.798	1.065	-.13530	.10950	.10970	-.13510	.11760	640.80000	.06300	.04670	.06300	-1.23154
.799	3.124	-.13470	.10940	.10960	-.13450	.11540	640.80000	.06196	.04764	.06196	-1.22719
.799	5.186	-.13340	.10780	.10800	-.13330	.11140	640.80000	.05885	.04915	.05885	-1.23426
.800	6.771	-.12720	.10480	.10490	-.12710	.10620	640.80000	.05517	.04973	.05517	-1.21163
	GRADIENT	-.00168	.00044	.00044	-.00167	.00064	-.00000	.00026	.00018	.00026	-.01060

RUN NO. 340/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.900	-4.947	-.11310	.11740	.11750	-.11300	.11720	605.90000	.07151	.04599	.07151	-.96170
.904	-2.961	-.11630	.12030	.12050	-.11610	.12350	605.90000	.07399	.04651	.07399	-.96349
.902	.028	-.12540	.12060	.12080	-.12520	.12740	605.90000	.07511	.04569	.07511	-1.03642
.901	3.124	-.12620	.12210	.12220	-.12610	.12520	605.90000	.07346	.04874	.07346	-1.03191
.900	5.181	-.12530	.11890	.11900	-.12520	.11860	605.90000	.06882	.05018	.06882	-1.05210
.900	6.718	-.12100	.11730	.11740	-.12090	.11260	605.90000	.06617	.05123	.06617	-1.02981
	GRADIENT	-.00176	.00051	.00051	-.00176	.00096	.00000	.00023	.00028	.00023	-.01046

ARC 11-747 OM53A B C M F W V NOM, RN/L

(REJ0539) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = -11.700 BDPLAP = .000  
 SPOBRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 190/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.052	-4.953	-.05750	.17990	.18000	-.05730	.10540	628.90000	.11652	.06348	.11652	-3.653
1.053	-2.962	-.05790	.17870	.17870	-.05770	.10520	628.90000	.11878	.05992	.11878	-3.2289
1.053	-.971	-.05860	.17670	.17670	-.05840	.10430	628.90000	.11806	.05864	.11806	-3.3050
1.053	.025	-.06390	.17650	.17660	-.06370	.10670	628.90000	.11833	.05827	.11833	-3.6070
1.053	1.065	-.06660	.17750	.17760	-.06640	.10870	628.90000	.11961	.05799	.11961	-3.7387
1.052	3.122	-.06780	.17730	.17740	-.06760	.10720	628.90000	.11904	.05836	.11904	-3.6106
1.052	5.185	-.06710	.17970	.17980	-.06700	.10430	628.90000	.11771	.06209	.11771	-3.7264
1.053	6.715	-.06710	.17920	.17920	-.06700	.10270	628.90000	.11661	.06259	.11661	-3.7388
GRADIENT		-.06147	-.06234	-.06233	-.06147	.09036	.00000	.00028	-.00062	.00028	-.00689

RUN NO. 343/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.201	-4.945	-.05850	.18700	.18700	-.05830	.08930	573.20000	.12899	.05801	.12899	-2.0481
1.201	-2.956	-.04150	.18790	.18800	-.04140	.09260	573.20000	.13198	.05602	.13198	-2.2021
1.201	.028	-.04670	.18730	.18730	-.04650	.09460	573.20000	.13355	.05375	.13355	-2.4826
1.196	3.120	-.05010	.18850	.18850	-.04990	.09480	573.20000	.13331	.05519	.13331	-2.6472
1.204	5.178	-.05130	.18860	.18860	-.05120	.09280	573.20000	.13227	.05633	.13227	-2.7147
1.201	6.794	-.05010	.18640	.18640	-.05000	.09100	573.20000	.12980	.05660	.12980	-2.6824
GRADIENT		-.050147	-.05014	-.05014	-.050146	.09065	-.00000	.00051	-.00037	.00051	-.00761



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## TABULATED SOURCE DATA - QAS3A

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AFC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ345) (03 APR 74)

## REFERENCE DATA

SPEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .00000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.0000 ELEVON = .000  
 AILRON = .0000 BDLAP = -11.700  
 SPDRK = 85.0000 RUDDER = .000  
 ELEV-L = .0000 ELEV-R = .000

RUN NO. 203/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.539	-5.034	.37660	.12450	.05650	.39260	.09260	481.40000	.01362	.04288	.08159	3.04342
.537	-2.993	.37770	.12600	.05790	.39390	.09190	481.40000	.01297	.04493	.08117	3.01276
.537	-1.981	.37270	.12630	.05900	.38910	.09240	481.40000	.01542	.04358	.08276	2.96764
.533	.031	.36360	.12600	.05930	.38600	.09240	481.40000	.01596	.04334	.08274	2.94863
.600	1.039	.37390	.12690	.05930	.39030	.09190	481.40000	.01573	.04357	.08326	2.96474
.538	3.066	.37170	.12750	.06040	.38830	.09560	481.40000	.01425	.04615	.08146	2.93352
.597	5.081	.37230	.12740	.06020	.38880	.08960	481.40000	.01353	.04667	.08084	2.93723
.537	7.110	.37340	.12410	.05680	.38940	.08430	481.40000	.00793	.04887	.07543	3.02391
.595	9.132	.37550	.12180	.05420	.39100	.07920	481.40000	.00257	.05163	.07043	3.09754
GRADIENT	-.00283		.00025	.00039	-.00277	-.00022	-.00000	.00020	.00018	.00007	-.01236

RUN NO. 199/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.799	-5.034	.38910	.15560	.08590	.41040	.09480	639.80000	.04069	.04431	.11133	2.51271
.799	-3.011	.38840	.15690	.08630	.40990	.09360	639.80000	.04242	.04388	.11296	2.48891
.798	-.979	.38210	.15550	.08610	.40340	.09630	639.80000	.04264	.04346	.11204	2.46911
.800	.033	.37590	.15560	.08730	.39730	.09760	639.80000	.04443	.04287	.11275	2.42714
.799	1.048	.38240	.15710	.08760	.40400	.09760	639.80000	.04316	.04444	.11266	2.44626
.797	3.072	.38060	.15760	.08850	.40230	.09590	639.80000	.04184	.04666	.11107	2.42539
.800	5.103	.37830	.15700	.08830	.39990	.09400	639.80000	.04111	.04719	.10992	2.42002
.799	7.130	.38450	.15340	.08360	.40540	.08780	639.80000	.03644	.04736	.10628	2.51556
.800	9.171	.36980	.15100	.08050	.41020	.07810	639.80000	.03186	.04864	.10261	2.59116
GRADIENT	-.00114		.00018	.00040	-.00110	.00011	.00000	-.00006	.00046	-.00025	-.01053

RUN NO. 341/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.902	-5.031	.40130	.18820	.11500	.42800	.08960	607.20000	.07146	.04354	.14470	2.14064
.900	-3.007	.39660	.18730	.11460	.42520	.09110	607.20000	.06980	.04480	.14257	2.13633
.902	.030	.39420	.18730	.11530	.42090	.09110	607.20000	.07269	.04261	.14467	2.11364
.900	3.078	.39640	.18700	.11470	.42310	.08910	607.20000	.06906	.04564	.14148	2.12819
.898	5.103	.39280	.18550	.11430	.41720	.08910	607.20000	.06729	.04701	.13871	2.11348
.902	7.137	.39260	.18570	.11420	.41900	.08290	607.20000	.06638	.04782	.13813	2.12170
GRADIENT	-.00036		-.00005	.00002	-.00034	-.00033	.00000	-.00012	.00014	-.00018	-.00033

ARC 11-747 QMS3A B C M F M V NOM. RN/L

(REJ040) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 191/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.050	-5.033	.49690	.25710	.16530	.53420	.02910	628.40000	.10077	.06553	.19200	1.93815
1.051	-3.006	.50290	.25700	.16530	.53920	.02470	628.40000	.10301	.06229	.19507	1.95891
1.045	-1.984	.49920	.25380	.16270	.53590	.02300	628.40000	.10116	.06154	.19268	1.97210
1.050	.028	.49990	.25460	.16340	.53670	.02160	628.40000	.10270	.06170	.19434	1.96829
1.052	1.038	.50350	.25550	.16360	.54040	.02160	628.40000	.10266	.06154	.19494	1.97597
1.049	3.068	.50210	.25560	.16400	.53990	.02240	628.40000	.10236	.06164	.19440	1.96912
1.047	5.103	.49770	.25630	.16350	.53480	.02590	628.40000	.10269	.06281	.19400	1.94618
1.050	7.132	.49320	.25590	.16580	.53030	.02850	628.40000	.10214	.06366	.19267	1.93233
1.048	9.154	.49400	.25100	.16100	.53020	.02720	628.40000	.09589	.06511	.18650	1.97184
	GRADIENT	.00023	-.00012	-.00015	.00019	-.00041	-.00000	-.00002	-.00013	.00001	.00170

RUN NO. 187/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.202	-5.026	.49530	.26040	.16960	.53330	.00910	573.60000	.10996	.05964	.20089	1.90344
1.198	-3.001	.49810	.25930	.16870	.53580	.00640	573.60000	.10919	.05881	.20057	1.92347
1.198	-1.981	.49670	.25780	.16680	.53420	.00260	573.60000	.10913	.05767	.20023	1.93410
1.199	.032	.49740	.25780	.16660	.53480	.00280	573.60000	.10868	.05792	.19990	1.93723
1.201	1.043	.50210	.25920	.16720	.53980	.00100	573.60000	.10928	.05732	.20135	1.94435
1.202	3.068	.49880	.26010	.16870	.53670	.00210	573.60000	.10877	.05933	.20031	1.92513
1.197	5.093	.49300	.26040	.17000	.53100	.00610	573.60000	.10331	.06169	.19986	1.90049
1.200	7.122	.48500	.25960	.17070	.52290	.01010	573.60000	.10901	.06169	.19815	1.87447
1.201	9.147	.48350	.25760	.16910	.52110	.00880	573.60000	.10723	.06187	.19609	1.88243
	GRADIENT	.00037	.00019	.00012	.00041	-.00072	-.00000	-.00006	.00018	.00002	.00104



DATE 06 JUL 74 TABULATED SOURCE DATA - 0453A

ARC 11-747 0453A B C M F MA V NOM. RN/L

(REJ041) ( 03 APR 74 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
AILRON = .000 BDFLAP = -11.700  
SPDRK = 85.000 RUDDER = .000  
ELEV-L = .000 ELEV-R = .000

RUN NO. 346/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.599	-5.001	.87410	.37380	.04850	.94950	.06830	479.70000	-.00132	.04982	.32351	2.36456
.599	-2.988	.87830	.37550	.04860	.95400	.06680	479.70000	-.00205	.05065	.32436	2.36545
.598	.027	.88570	.38030	.05050	.96260	.06590	479.70000	-.00059	.05109	.32868	2.35550
.597	3.068	.87950	.37350	.04640	.95440	.06760	479.70000	-.00251	.04891	.32407	2.38084
.600	5.094	.87050	.36870	.04500	.94430	.06900	479.70000	-.00379	.04879	.31941	2.38726
.598	7.120	.87310	.36750	.04320	.94630	.06370	479.70000	-.00386	.05306	.31439	2.40071
GRADIENT		.00019	-.00033	-.00036	.00006	.00013	.00000	-.00008	-.00029	-.00005	.00255

RUN NO. 200/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.797	-5.043	.81470	.38980	.08360	.89930	.08870	638.30000	.03190	.05170	.33755	2.11446
.799	-3.021	.80640	.39240	.08890	.89240	.09110	638.30000	.03796	.05094	.34089	2.07887
.796	-.985	.80430	.39510	.09220	.89140	.09210	638.30000	.03792	.05428	.34051	2.05394
.799	.032	.79990	.39490	.09350	.88720	.09170	638.30000	.03844	.05506	.33956	2.04385
.800	1.061	.79900	.39490	.09380	.88630	.09060	638.30000	.03919	.05461	.33996	2.04656
.798	3.091	.79730	.39230	.09220	.88380	.09050	638.30000	.03841	.05379	.33837	2.05434
.799	5.130	.79870	.38880	.08840	.88390	.08760	638.30000	.03651	.05189	.33662	2.07680
.800	7.182	.79970	.38330	.08300	.88290	.08230	638.30000	.03039	.05261	.33052	2.10880
.803	9.226	.80310	.37420	.07350	.88300	.07500	638.30000	.02473	.04877	.32525	2.16834
GRADIENT		-.00160	-.00002	.00056	-.00152	-.00016	-.00000	.00013	.00044	-.00040	-.00422

RUN NO. 342/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.898	-5.056	.80660	.41640	.11180	.92080	.08850	610.40000	.05528	.05652	.36003	1.95628
.903	-3.024	.80790	.42320	.11810	.91440	.08480	610.40000	.06098	.05712	.36663	1.92592
.901	.030	.81330	.42740	.12000	.91080	.08360	610.40000	.06275	.05748	.37048	1.92052
.901	3.105	.81770	.42680	.11800	.91480	.08290	610.40000	.06028	.05772	.36953	1.93332
.903	5.138	.80950	.41850	.11310	.90430	.08230	610.40000	.05624	.05686	.36214	1.95174
.900	7.188	.81550	.41150	.10470	.90740	.07710	610.40000	.04739	.05731	.35488	1.99853
GRADIENT		.00160	.00059	-.00002	.00170	-.00031	.00000	-.00011	.00047	.00047	.00121

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(REJ041) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDPRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 192/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.051	-5.042	.97000	.51990	.15180	1.09000	-.00210	628.30000	.08203	.06977	.44789	1.88641
1.051	-3.021	.97320	.52400	.15450	1.09400	-.00500	628.30000	.08301	.07149	.45218	1.87769
1.051	-.970	.98490	.52780	.15380	1.10700	-.01070	628.30000	.08239	.07141	.45603	1.88790
1.050	.023	.98550	.52710	.15390	1.10700	-.01120	628.30000	.08236	.07164	.45601	1.89114
1.046	1.043	.98820	.52850	.15340	1.11000	-.01280	628.30000	.07914	.07426	.45401	1.89120
1.046	3.090	.97220	.52460	.15540	1.09400	-.00300	628.30000	.08364	.07176	.45276	1.87404
1.046	5.146	.96340	.51640	.15090	1.08300	-.00170	628.30000	.08255	.06835	.44798	1.86610
1.050	7.171	.95640	.51220	.14950	1.07500	-.00490	628.30000	.07889	.07161	.44180	1.88729
1.046	9.199	.95630	.50750	.14540	1.07300	-.00190	628.30000	.07397	.07143	.43650	1.90335
	GRADIENT	.00001	.00012	.00011	.00014	.00019	.00000	-.00007	.00018	-.00001	-.00038

RUN NO. 344/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.200	-5.033	.94270	.51010	.15320	1.06100	-.02200	573.20000	.09021	.06299	.44766	1.86372
1.204	-3.013	.94680	.51500	.15630	1.06600	-.02640	573.20000	.08990	.06640	.44907	1.85399
1.202	.027	.95050	.51680	.15670	1.07100	-.02960	573.20000	.08969	.06701	.45058	1.85534
1.199	3.082	.94770	.51590	.15680	1.06800	-.02680	573.20000	.09066	.06614	.45047	1.85315
1.198	5.116	.94150	.51560	.15410	1.06000	-.02480	573.20000	.08930	.06480	.44645	1.85941
1.203	7.157	.93180	.50250	.15010	1.04400	-.02390	573.20000	.08743	.06267	.44060	1.86885
	GRADIENT	.00015	.00015	.00018	.00033	-.00016	.00000	.00013	-.00004	.00023	-.00014



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W Y NOM. RN/L

(REJ043) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. ZMRP = 12.3010 IN.  
 -REF = 14.2440 IN. YMRP = 1.0000 IN.  
 B-REF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0330 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEWIN = .0000  
 ALLORN = 15.0000 BDELAP = -11.7000  
 SPBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 288/0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.599	-1.644	-0.8030	.08580	.08490	-.08150	.04300	480.80000	.05149	.03341	.05240	-.93858
.597	-1.109	-0.5390	.08490	.08590	-.05380	.04190	480.80000	.05071	.03429	.05060	-.63560
.599	1.119	-0.0310	.08470	.08470	-.00150	.04160	480.80000	.05034	.03436	.05030	-.03708
.599	1.614	.01970	.08390	.08390	.02200	.04150	480.80000	.05109	.03221	.05169	.23419
.598	3.597	.11330	.08600	.07470	.11850	.03990	480.80000	.04396	.03474	.05131	1.31809
.598	5.562	.20570	.09090	.07060	.21360	.03910	480.80000	.03875	.03165	.05927	2.26174
.599	7.634	.30650	.10090	.05920	.31720	.03780	480.80000	.02815	.03103	.07004	3.04050
.599	9.605	.41360	.11770	.04710	.42750	.03380	480.80000	.01235	.03475	.08351	3.51234
.599	12.630	.57620	.15810	.02890	.59690	.02980	480.80000	-.00668	.03493	.12400	3.64427
.600	15.690	.69710	.23070	.03360	.73350	.03290	480.80000	-.00260	.03620	.19586	3.02146
.599	18.720	.83390	.31080	.03440	.89170	.02660	480.80000	-.00627	.04067	.28025	2.61473
.600	21.720	.95260	.41620	.03410	1.03900	.03630	480.80000	-.00974	.04384	.37546	2.20893
.599	24.730	1.01700	.50220	.03050	1.13400	.06620	480.80000	-.02189	.05239	.45451	2.02596
.600	28.700	.92480	.55100	.03930	1.07600	.14590	480.80000	-.02803	.06733	.49214	1.67807
GRADIENT	.04636	.00000	.00000	-.00152	.04782	-.00067	.00000	-.00168	.00016	-.00010	.54072

RUN NO. 288/0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.798	-1.664	-1.0070	.09370	.09250	-.10180	.05330	641.20000	.05875	.03375	.05392	-1.07523
.798	.079	-0.0610	.09250	.09260	-.06290	.05110	641.20000	.05832	.03428	.05824	-.60129
.800	1.111	-0.0090	.09160	.09180	-.00720	.04810	641.20000	.05771	.03409	.05756	-.09797
.798	1.614	.01790	.09150	.09100	.02050	.04660	641.20000	.05748	.03352	.05804	.19585
.797	3.568	.12330	.09460	.08670	.12890	.04190	641.20000	.05348	.03322	.05140	1.30334
.798	5.570	.23070	.10350	.07980	.24760	.03450	641.20000	.04530	.03450	.06312	2.30713
.800	7.626	.35890	.12190	.07320	.37190	.02330	641.20000	.04009	.03311	.08909	2.94404
.799	9.612	.45440	.14870	.07070	.47280	.01990	641.20000	.03562	.03508	.11406	3.05649
.799	12.630	.57130	.20350	.07360	.60200	.02490	641.20000	.03769	.03591	.16841	2.80827
.797	15.700	.70860	.28360	.08120	.75890	.01630	641.20000	.03782	.03972	.24529	2.49926
.801	18.770	.81940	.36650	.08350	.89340	.02840	641.20000	.03782	.04568	.32328	2.23453
.799	21.770	.87790	.44010	.08320	.97850	.06070	641.20000	.02953	.05367	.39033	1.99434
.799	24.740	.87940	.49790	.08430	1.00700	.12420	641.20000	.01705	.06725	.43631	1.76567
.799	28.690	.89350	.58830	.08720	1.06600	.15180	641.20000	.01290	.07430	.52307	1.51851
GRADIENT	.05302	.00000	.00000	-.00142	.05460	-.00270	.00000	-.00123	-.00019	.00043	.56412

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(REJ043) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XNRF = 32.3010 IN.  
 LREF = 14.2440 IN. YNRF = .0000 IN.  
 BREF = 28.1004 IN. ZNRF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRLON = 15.0000 BDFLAP = -11.7000  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 287/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.900	-1.669	-1.1280	.10940	.10810	-1.11400	.06710	614.60000	.07307	.03503	.07439	-1.03022
.901	.068	-.07120	.10820	.10830	-.07110	.06290	614.60000	.07322	.03508	.07314	-.65821
.902	1.125	-.00680	.10860	.10870	-.00470	.05600	614.60000	.07369	.03501	.07358	-.06293
.900	1.312	.02190	.10860	.10790	.02500	.03290	614.60000	.07288	.03502	.07355	.20224
.904	3.545	.15020	.11660	.10710	.15710	.03400	614.60000	.07199	.03511	.08156	1.28787
.899	5.569	.27460	.12880	.10160	.28580	.01690	614.60000	.06754	.03406	.09496	2.11310
.903	7.601	.38820	.15440	.10180	.40510	.00380	614.60000	.06656	.03524	.11956	2.51198
.902	9.616	.48090	.18420	.10120	.50490	.00290	614.50000	.06329	.03800	.14665	2.61191
.902	15.680	.60770	.24220	.10370	.64590	.00420	614.60000	.06135	.04235	.20088	2.50893
.899	18.770	.73830	.32050	.10930	.79740	-.00100	614.60000	.06556	.04344	.27263	2.30383
.899	21.770	.83230	.40010	.11110	.91680	.00980	614.60000	.06051	.05059	.35229	2.07975
.901	24.720	.87680	.46870	.11010	.98810	.04280	614.60000	.05285	.05725	.41555	1.87063
.900	28.670	.95550	.53720	.10880	1.04800	.10530	614.60000	.03608	.07272	.47103	1.68774
.900	GRADIENT	.06252	.00175	-.00026	.06445	.00785	.00000	-.00027	.00001	.00175	1.48931

RUN NO. 286/ 0 RN/L = 3.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.051	-1.657	-.08930	.17110	.17010	-.09120	.06780	627.60000	.11266	.05744	.11370	-.52147
1.030	.056	-.04380	.16960	.16960	-.04360	.05780	627.60000	.11308	.05652	.11304	-.25812
1.030	1.091	.03020	.17110	.17050	.03340	.04220	627.60000	.11348	.05702	.11410	.17619
1.049	1.597	.06340	.17030	.16850	.06820	.03440	627.60000	.11097	.05753	.11283	.37266
1.050	3.571	.19680	.18170	.16910	.20770	.00750	627.60000	.11258	.05652	.12530	1.08286
1.052	5.529	.31640	.19760	.16220	.33400	-.01400	627.60000	.10827	.05793	.13994	1.60132
1.052	7.609	.43310	.22200	.16280	.45870	-.03100	627.60000	.10506	.05774	.16487	1.95401
1.051	9.569	.54520	.25550	.15780	.58010	-.04560	627.60000	.10061	.06069	.19564	2.11301
1.050	12.590	.70180	.31840	.15780	.75430	-.05810	627.60000	.09404	.06376	.25620	2.40388
1.049	15.650	.83690	.39780	.15730	.91310	-.06160	627.60000	.08951	.06779	.33251	2.11308
1.048	18.700	.96750	.49200	.15580	1.07400	-.06330	627.60000	.08270	.07310	.42267	1.96651
1.049	21.710	1.06500	.58730	.15160	1.20700	-.05560	627.60000	.07274	.07886	.51406	1.61382
1.052	24.750	1.09400	.66730	.14780	1.27300	-.04880	627.60000	.06442	.08338	.59145	1.64003
1.050	28.670	1.11000	.76790	.14130	1.34200	.03540	627.60000	.04799	.09331	.68595	1.44523
1.050	GRADIENT	.06795	.00257	-.00025	.07098	-.01433	.00000	-.00014	-.00011	.00271	.38175





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TABULATED SOURCE DATA - 0453A

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(REJ043) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 N.  
 BREF = 28.1004 IN. ZREF = 11.2500 L.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = 15.0000 BDFLAP = -11.7000  
 SPBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 285/0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/C
1.201	-0.664	-0.05890	.17240	.17170	-.06090	.04360	568.20000	.11583	.05587	.11653	-.34169
1.199	.058	-.01930	.17110	.17110	-.01920	.03420	568.20000	.11642	.05468	.11640	-.11325
1.201	1.077	.04600	.17080	.16990	.04920	.02030	568.20000	.11534	.05456	.11625	.26932
1.202	1.586	.07340	.17130	.16920	.07810	.01390	568.20000	.11577	.05343	.11789	.42842
1.196	3.537	.18830	.17960	.16760	.19900	-.00900	568.20000	.11381	.05379	.12587	1.04858
1.199	5.526	.29900	.19510	.16540	.31640	-.02880	568.20000	.11117	.05423	.14112	1.53256
1.199	7.585	.41080	.21880	.16260	.43610	-.04560	568.20000	.10715	.05545	.16377	1.87812
1.201	9.567	.51870	.24810	.15840	.53270	-.05860	568.20000	.10168	.05672	.19212	2.09101
1.201	12.590	.68060	.31240	.15660	.73230	-.07400	568.20000	.09627	.06033	.25357	2.17809
1.198	15.660	.82620	.39360	.15670	.90180	-.08530	568.20000	.09170	.06430	.33172	2.09896
1.199	18.710	.94810	.48370	.15490	1.05300	-.08920	568.20000	.08558	.06842	.41884	1.96303
1.198	21.710	1.03800	.57440	.14960	1.17700	-.08140	568.20000	.07790	.07170	.50775	1.80750
1.200	24.680	1.09400	.66030	.14330	1.27000	-.05800	568.20000	.06833	.07497	.59238	1.65836
1.198	28.660	1.15020	.77730	.13070	1.38200	-.02740	568.20000	.05143	.07927	.70796	1.47907
GRADIENT		.05912	.00177	-.00000	.06215	-.01255	.00000	-.00000	-.00047	.00225	.33302

DATE 06 JUL 74

## TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REJ046) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEWON = .0000  
 AIRLON = .0000 BDFLAP = -11.700  
 SPDRK = 85.0000 RUDDER = -10.000  
 ELEVL = .0000 ELEVR = .0000

RUN NO. 247 / 0 RN/L = 3.98 GRADIENT INTERVAL = -5.000/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
.600	-5.004	.87380	.37160	.04640	.94840	.06760	482.60000	-.00373	.05013	-.00373	20.43966
.598	-2.992	.87650	.37500	.04860	.95210	.06770	482.60000	-.00241	.05101	-.00241	19.59053
.599	-.980	.87760	.37750	.05050	.95400	.06670	482.60000	-.00058	.05178	-.00058	18.89103
.597	.025	.87540	.37620	.05020	.95150	.06600	482.60000	-.00061	.05151	-.00061	18.95413
.599	1.042	.87730	.37700	.05010	.95350	.06630	482.60000	-.00108	.05118	-.00108	19.03194
.599	3.069	.87230	.37050	.04590	.94670	.06740	482.60000	-.00234	.04824	-.00234	20.62327
.597	5.094	.86520	.36650	.04470	.93850	.0712	482.60000	-.00520	.04990	-.00520	20.99453
.599	7.117	.86080	.36100	.04130	.93250	.06480	482.60000	-.00839	.04969	-.00839	22.57864
.600	9.149	.87360	.35720	.03350	.94320	.05140	482.60000	-.01813	.05163	-.01813	28.15520
GRADIENT		-.00060	-.00069	-.00042	-.00083	-.00006	.00000	-.00002	-.00004	-.00002	.16124

RUN NO. 244 / 0

RN/L = 4.22 GRADIENT INTERVAL = -5.000/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
.798	-4.947	-.11970	.10440	.10450	-.11960	.10900	641.10000	.05912	.04538	.05912	-1.14451
.799	-2.963	-.12550	.10710	.10730	-.12540	.11390	641.10000	.06206	.04524	.06206	-1.16869
.799	-.969	-.13160	.10760	.10780	-.13150	.11570	641.10000	.06260	.04520	.06260	-1.21980
.800	.027	-.13570	.10830	.10850	-.13550	.11570	641.10000	.06204	.04646	.06204	-1.24883
.802	1.062	-.13390	.10840	.10860	-.13380	.11580	641.10000	.06374	.04486	.06374	-1.23204
.797	3.120	-.13250	.10880	.10890	-.13240	.11330	641.10000	.06157	.04733	.06157	-1.21575
.798	5.183	-.12960	.10680	.10700	-.12950	.10490	641.10000	.05881	.04819	.05881	-1.21028
.801	6.846	-.12460	.10390	.10400	-.12450	.10460	641.10000	.05501	.04899	.05501	-1.19712
GRADIENT		-.00179	.00051	.00051	-.00178	.00055	.00000	.00032	.00019	.00032	-.01103

RUN NO. 241 / 0

RN/L = 3.76 GRADIENT INTERVAL = -5.000/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFAD	Q	CAF	CAB	CDF	L/D
.908	-4.950	-.11480	.11830	.11850	-.11470	.11760	621.20000	.07224	.04566	.07224	-.96793
.899	-2.961	-.12570	.11800	.11820	-.12560	.12550	621.20000	.07335	.04485	.07335	-1.06261
.901	-.969	-.12930	.11930	.11940	-.12920	.12730	621.20000	.07475	.04465	.07475	-1.08710
.902	.023	-.13280	.11960	.11980	-.13260	.12840	621.20000	.07445	.04535	.07445	-1.10684
.901	1.061	-.13210	.12020	.12040	-.13190	.12750	621.20000	.07499	.04551	.07499	-1.10151
.902	3.120	-.13050	.12190	.12210	-.13040	.12520	621.20000	.07379	.04831	.07379	-1.07698
.900	5.185	-.12860	.11960	.11970	-.12850	.11870	621.20000	.06931	.05039	.06931	-1.07142
.899	6.715	-.12340	.11750	.11750	-.12330	.11310	621.20000	.06653	.05097	.06653	-1.04936
GRADIENT		-.00195	.00046	.00046	-.00195	.00090	-.00000	.00018	.00028	.00018	-.01124



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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F M V NOM. RN/L

(REJ046) ( 03 APR 74 )

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .020 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 238/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.049	-4.954	-.05670	.17590	.17600	-.05650	.10360	627.20000	.11584	.06016	.11584	-32102
1.051	-2.953	-.05590	.17570	.17580	-.05480	.10210	627.20000	.11716	.05864	.11716	-31172
1.052	-9.70	-.06040	.17620	.17620	-.06020	.10300	627.20000	.11839	.05781	.11839	-34166
1.050	.023	-.06480	.17590	.17600	-.06460	.10720	627.20000	.11758	.05842	.11758	-36705
1.051	1.038	-.06580	.17540	.17540	-.06560	.10690	627.20000	.11659	.05881	.11659	-37400
1.047	3.118	-.06740	.17680	.17690	-.06720	.10550	627.20000	.11667	.06023	.11667	-37988
1.049	5.184	-.06810	.17920	.17930	-.06790	.10430	627.20000	.11660	.06270	.11660	-37869
1.051	6.675	-.06750	.17910	.17920	-.06740	.10310	627.20000	.11505	.06415	.11505	-37612
	GRADIENT	-.06164	.02207	.02207	-.02164	.00047	-1.00000	.00006	.00000	.00006	-0.00918

RUN NO. 235/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
1.197	-4.948	-.04250	.18490	.18490	-.04240	.08930	570.10000	.12758	.05732	.12758	-22931
1.201	-2.954	-.04560	.18690	.18700	-.04550	.09340	570.10000	.13201	.05499	.13201	-24332
1.200	-.968	-.04910	.18710	.18710	-.04900	.09530	570.10000	.13358	.05352	.13358	-26189
1.199	.026	-.04930	.18670	.18680	-.04910	.09460	570.10000	.13364	.05316	.13364	-26285
1.201	1.059	-.05160	.18730	.18740	-.05150	.09450	570.10000	.13317	.05423	.13317	-27481
1.199	3.122	-.05400	.18820	.18820	-.05390	.09400	570.10000	.13216	.05604	.13216	-28640
1.195	5.175	-.05530	.18700	.18700	-.05520	.09360	570.10000	.13041	.05659	.13041	-29519
1.196	6.660	-.05650	.18580	.1858	-.05640	.09370	570.10000	.12868	.05712	.12868	-30355
	GRADIENT	-.05143	.02234	.02234	-.05142	.00053	-1.00000	.00054	-.00020	.00054	-0.00716

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RM/L

(REJ047) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPBRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 248/0 RM/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.598	-5.013	.38010	.12380	.05530	.39590	.09130	480.90000	.01251	.04279	.01251	7.15913
.600	-2.997	.38030	.12540	.05680	.39640	.09170	480.90000	.01266	.04414	.01266	6.97887
.602	-1.981	.37390	.12180	.05840	.39420	.09190	480.90000	.01555	.04285	.01555	6.68151
.578	.032	.37220	.12600	.05680	.38850	.09150	480.90000	.01547	.04333	.01547	6.60714
.600	1.041	.37720	.12660	.05850	.39360	.09110	480.90000	.01580	.04270	.01580	6.72821
.598	3.062	.37470	.12630	.05870	.39100	.08880	480.90000	.01411	.04459	.01411	6.66039
.597	5.085	.37350	.12590	.05820	.39180	.08850	480.90000	.01183	.04637	.01183	6.73196
.599	7.105	.37820	.12310	.05900	.39390	.08230	480.90000	.00798	.04702	.00798	7.16182
.598	9.127	.37770	.11980	.05190	.39280	.07740	480.90000	.00274	.04916	.00274	7.56840
GRADIENT		-.00267	.00017	.00229	-.00263	-.00247	.00000	.00023	.00000	.00023	-.04486

RUN NO. 245/0 RM/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.759	-5.036	.39050	.15390	.08310	.41140	.09310	642.10000	.03997	.04313	.03997	4.95056
.800	-3.001	.39080	.15720	.08630	.41230	.09480	642.10000	.04226	.04404	.04226	4.77752
.798	-.986	.38320	.15540	.08590	.40450	.09540	642.10000	.04295	.04295	.04295	4.70636
.796	.030	.37950	.15560	.08680	.40340	.09670	642.10000	.04367	.04315	.04367	4.61290
.799	1.048	.38410	.15690	.08720	.40370	.09610	642.10000	.04305	.04415	.04305	4.65252
.799	3.079	.38140	.15650	.08730	.40290	.09380	642.10000	.04284	.04446	.04284	4.61512
.796	5.110	.38320	.15520	.08570	.40450	.09110	642.10000	.03913	.04657	.03913	4.71995
.801	7.137	.38770	.15340	.08310	.40850	.08590	642.10000	.03720	.04590	.03720	4.91576
.801	9.168	.39130	.14950	.07880	.41140	.07650	642.10000	.03032	.04848	.03032	5.22041
GRADIENT		-.00134	-.00203	.00021	-.00133	-.00011	.00000	.00009	.00012	.00009	-.10075

RUN NO. 242/0 RM/L = 3.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.907	-5.034	.40170	.18880	.11550	.42860	.08680	620.30000	.07211	.04339	.07211	3.71092
.904	-3.001	.39590	.18600	.11390	.42240	.08940	620.30000	.07172	.04218	.07172	3.70852
.908	-.981	.38240	.18250	.11280	.40840	.09300	620.30000	.07071	.04209	.07071	3.62057
.902	.029	.38950	.18580	.11480	.41680	.08960	620.30000	.07077	.04403	.07077	3.62359
.905	1.052	.39370	.18720	.11550	.42040	.08770	620.30000	.07134	.04416	.07134	3.63983
.900	3.070	.39390	.18650	.11470	.42050	.08880	620.30000	.06983	.04487	.06983	3.66803
.897	5.110	.38770	.18500	.11440	.41410	.08820	620.30000	.06740	.04692	.06740	3.60576
.900	7.141	.38970	.18370	.11280	.41580	.08260	620.30000	.06487	.04733	.06487	3.68817
.899	9.174	.39440	.18050	.10890	.41980	.07420	620.30000	.05662	.05028	.05662	3.85491
GRADIENT		.00026	.00031	.00025	.00031	-.00035	.00000	-.00025	.00053	-.00025	-.00052



DATE 06 JUL 74

## TABULATED SOURCE DATA - OMSSA

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ARC 11-747 OMSSA B C M F W V NOM. RN/L

(REJ047) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 239/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.055	-5.029	.50330	.25660	.16310	.53750	.02570	629.80000	.10183	.06327	.10183	3.25563
1.056	-5.007	.50390	.25610	.16410	.54090	.02340	629.80000	.10310	.06100	.10310	3.29616
1.049	-4.985	.50200	.25380	.16220	.53870	.02140	629.80000	.10030	.06190	.10030	3.32121
1.055	-5.026	.50280	.25550	.16370	.53950	.01800	629.80000	.10232	.06158	.10232	3.29566
1.056	-5.036	.50480	.25610	.16390	.54180	.01820	629.80000	.10188	.06202	.10188	3.30567
1.051	-5.066	.50490	.25600	.16380	.54190	.02010	629.80000	.10271	.06109	.10271	3.30830
1.049	-5.102	.50250	.25570	.16350	.53750	.02260	629.80000	.09993	.06437	.09993	3.27145
1.048	-7.129	.49520	.25640	.16560	.53230	.02750	629.80000	.09965	.06595	.09965	3.21437
1.051	-9.153	.49350	.25140	.16140	.52980	.02520	629.80000	.09620	.06520	.09620	3.28253
GRADIENT		.00229	.00310	.00224	.02030	-.00065	-.00000	.00002	.00002	.00002	.00100

RUN NO. 236/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.197	-5.026	.49750	.25780	.16690	.53490	.02630	568.80000	.10754	.05936	.10754	3.20491
1.197	-3.005	.49910	.25720	.16600	.53640	.00500	568.80000	.10773	.05827	.10773	3.23133
1.198	-4.984	.49860	.25690	.16580	.53580	.00070	568.80000	.10836	.05744	.10836	3.23160
1.197	-5.025	.49930	.25660	.16540	.53640	.00090	568.80000	.10797	.05743	.10797	3.24305
1.198	-5.041	.50360	.25870	.16620	.54100	.00020	568.80000	.10765	.05835	.10765	3.25904
1.196	-5.067	.50110	.25910	.16760	.53860	.00100	568.80000	.10769	.05991	.10769	3.21360
1.195	-5.093	.49530	.25880	.16830	.53280	.00410	568.80000	.10889	.05941	.10889	3.16578
1.194	-7.117	.48650	.25870	.16980	.52420	.00870	568.80000	.10825	.06151	.10825	3.08716
1.197	-9.145	.48380	.25660	.16830	.52110	.00900	568.80000	.10691	.06139	.10691	3.03626
GRADIENT		.00254	.00234	.00425	.02058	-.00062	-.00000	-.00004	.00029	-.00004	-.00127

AFRC 11-747 0453A B C M F W Y NDM. RM/L

(REF ID: A674)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0310 SCALE

### PARAMETRIC DATA

ALPHA =	20.000	ELEVON =	.0000
ALLEN =	.000	BDELAF =	-11.700
SPOKE =	85.0	RUDER =	-10.000
ELEV-L =	0.000	ELEV-R =	.0000

REG. NO. 249/01 RM/L = 3.98 GRADIENT INTERVAL = -5.00/1000

NAME	BETA	CL	CD	C <sub>1</sub>	CN	C(NFCD)	Q	CAF	CAB	CDF	L/D
.539	-4.332	-1.0795	.53965	.59995	-1.0740	.59460	481.43240	.55369	.1461	.01591	-2.336411
.539	-2.952	-1.1135	.10295	.10310	-1.11340	.09820	481.43000	.55629	.1464	.01411	-2.44114
.601	-.965	-1.1865	.10375	.10280	-1.11765	.09925	481.43020	.5735	.1461	.01364	-2.55556
.601	.226	-1.2055	.10345	.10250	-1.20405	.09975	481.43040	.5771	.1459	.0135	-2.64473
.599	1.057	-1.2005	.10425	.10445	-1.19605	.09910	481.43070	.5774	.1456	.01334	-2.59952
.597	2.115	-1.2245	.10355	.10395	-1.2235	.09765	481.4300	.5584	.1466	.01064	-2.65618
.600	3.167	-1.1155	.10175	.10170	-1.11540	.09395	481.43000	.5546	.1472	.01173	-2.5513
.600	6.678	-1.1185	.09845	.09850	-1.1170	.08990	481.4300	.5556	.1474	.00931	-2.5513
GEANT			.02246	.02246	-.02185	.00335	481.4300	.5537	.1477	.00369	

RUN NO. 246 / C    RN/L = 4.24    GRADIENT INTERVAL = 5.00 / 5.00

Model	Beta	LL	CD	CA	CN	CLMFD	Q	CAF	CAE	CSF	RMSE
MMGM	0.2	-82.40	-33210	-90460	-90530	0.0050	644.6304	0.3553	0.0477	343.82	2.1110
	0.739	-81476	-33320	-90760	-90840	0.0930	644.6304	0.3541	0.0516	342.17	2.1079
	-0.777	-81230	-33640	-93140	-93450	0.0960	644.6304	0.3706	0.0534	343.19	2.1063
	0.737	-81020	-33680	-93270	-93720	0.0970	644.6304	0.3783	0.0547	342.41	2.1059
	0.535	-81670	-339710	-93410	-94250	0.0990	644.6304	0.3945	0.0545	342.62	2.1043
	1.056	-81590	-33260	-93930	-94190	0.0890	644.6304	0.3636	0.0534	333.21	2.1039
	3.142	-81590	-33260	-93930	-94190	0.0890	644.6304	0.3636	0.0534	333.21	2.1039
	5.137	-81650	-33480	-90670	-89110	0.0470	644.6304	0.3498	0.0512	337.65	2.1033
	7.182	-81340	-34070	-82010	-83540	0.0420	644.6304	0.2683	0.0521	329.98	2.1026
	9.224	-81930	-37190	-77020	-80790	0.0720	644.6304	0.3168	0.0515	321.23	2.1020
GMST		-81157	-332010	-92751	-93151	-0.0038	644.6304	0.3553	0.0445	340.46	2.1019

RUN NO. 243/6       $RW/L = 3.74$       GRADIENT INTERVAL =  $5.00 / 5.00$

[illegible]

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## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ048) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1064 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEWON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 245/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.049	-5.044	.97610	.52077	.15140	1.09600	-.00170	627.70000	.08197	.06943	.45188	1.89147
1.055	-3.015	.97990	.52590	.15490	1.10100	-.00780	627.70000	.08377	.07113	.45528	1.88006
1.052	-.983	.99920	.53090	.15280	1.12100	-.01700	627.70000	.08173	.07107	.46021	1.89972
1.051	.024	.99330	.52780	.15200	1.11500	-.01480	627.70000	.08058	.07142	.45707	1.89965
1.048	1.047	.99150	.52910	.15410	1.11300	-.01360	627.70000	.07966	.07444	.45552	1.89005
1.048	3.028	.97540	.52340	.15440	1.09600	-.00380	627.70000	.08174	.07266	.45167	1.87924
1.049	5.127	.96680	.51580	.15050	1.08500	-.00290	627.70000	.08069	.06981	.44691	1.88890
1.052	7.163	.93740	.51030	.14980	1.07500	-.00190	627.70000	.07778	.07402	.44076	1.89021
1.051	9.205	.95600	.50590	.14480	1.07200	-.00340	627.70000	.07489	.06991	.43702	1.90531
GRADIENT		-.00105	-.00046	-.00001	-.00114	.00076	-.00000	-.00040	.00039	-.00076	-.00060

RUN NO. 237/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.197	-5.033	.94300	.50920	.15230	1.06100	-.02330	569.10000	.08908	.06322	.44659	1.86744
1.200	-3.014	.94520	.51320	.15520	1.06400	-.02310	569.10000	.08853	.06657	.44720	1.85729
1.200	-.988	.94650	.51360	.15500	1.06600	-.02770	569.10000	.08815	.06705	.44742	1.85848
1.199	.023	.94810	.51380	.15480	1.06700	-.03070	569.10000	.08854	.06626	.44813	1.86071
1.195	1.044	.94820	.51390	.15490	1.06700	-.02900	569.10000	.08787	.06703	.44751	1.86030
1.193	3.081	.94110	.51170	.15530	1.06000	-.02520	569.10000	.08846	.06664	.44567	1.85448
1.194	5.115	.93150	.50370	.15120	1.04800	-.02160	569.10000	.08576	.06544	.43903	1.86424
1.197	7.152	.93000	.49840	.14700	1.04500	-.02450	569.10000	.08399	.06301	.43633	1.88015
1.196	9.198	.92420	.49190	.14310	1.03700	-.02370	569.10000	.08251	.06159	.43221	1.89211
GRADIENT		-.00052	-.00021	.00000	-.00054	.00007	-.00000	-.00004	.00004	-.00022	-.00033

ARC 11-747 0433A B C M F W V NOM. RN/L SEAL/EL

(REJ049) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILRON = .000 BOFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 370/ 0 RN/L = 3.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.599	-5.15	.21710	.08550	.08750	.21640	-.12230	480.80000	.04709	.04041	.04514	2.53856
.599	-1.04	.24450	.08740	.08690	.24470	-.12280	480.80000	.04687	.04003	.04731	2.79972
.598	1.115	.29550	.09200	.08620	.29720	-.12410	480.80000	.04701	.03919	.05278	3.21274
.596	1.626	.31750	.09420	.08520	.32000	-.12530	480.80000	.04530	.03990	.05436	3.36836
.596	3.572	.41590	.10560	.07950	.42170	-.12870	480.80000	.03894	.04056	.06513	3.93801
.600	5.558	.51700	.12100	.07040	.52630	-.13320	480.80000	.03122	.03918	.08205	4.27127
.597	7.621	.62380	.14380	.05980	.63740	-.13920	480.80000	.01987	.03993	.10422	4.33813
.600	9.595	.74320	.17220	.04590	.76150	-.14920	480.80000	.00697	.03893	.13380	4.31622
.595	12.640	.90190	.24200	.03880	.93300	-.15500	480.80000	-.00076	.03956	.20342	3.72650
.599	15.690	1.01000	.33120	.04570	1.06200	-.14980	480.80000	.00233	.04337	.28944	3.04976
.597	18.730	1.16100	.45050	.05380	1.24400	-.15550	480.80000	.00368	.05012	.40294	2.57731
.597	21.760	1.27900	.56660	.05210	1.39800	-.16130	480.80000	-.01955	.05775	.51302	2.25724
.597	24.720	1.23800	.62550	.05050	1.38600	-.16130	480.80000	-.01955	.07005	.56185	1.97909
.595	28.680	1.09100	.67450	.06830	1.28100	-.16040	480.80000	-.02258	.09088	.59497	1.61712
GRADIENT	.04877	.00497	.00195	-.00161	.05037	-.00161	.00000	-.00201	.00006	.00493	.34067

RUN NO. 369/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	q	CAF	CAB	CDF	L/D
.792	-5.11	.18860	.09180	.09350	.18780	-.11760	634.20000	.05259	.04091	.05091	2.05428
.802	1.00	.21850	.09400	.09370	.21870	-.11880	634.20000	.05389	.03981	.05427	2.32279
.798	1.109	.27480	.09760	.09230	.27660	-.12280	634.20000	.05143	.04087	.05678	2.81414
.802	1.620	.30160	.10090	.09240	.30450	-.12530	634.20000	.05146	.04094	.06004	2.98682
.801	3.562	.41520	.11320	.08710	.42140	-.13350	634.20000	.04789	.03921	.07397	3.67045
.803	5.563	.53990	.13480	.08180	.55040	-.14810	634.20000	.04269	.03911	.09584	4.00551
.801	7.618	.65850	.16820	.07940	.67590	-.15960	634.20000	.03914	.04026	.12827	3.91549
.799	9.595	.73280	.20390	.07890	.75660	-.15560	634.20000	.03855	.04035	.16412	3.59409
.798	12.620	.83110	.27140	.08300	.87130	-.14910	634.20000	.03991	.04309	.22931	3.06647
.800	15.690	.98120	.37150	.09230	1.04500	-.16490	634.20000	.04345	.04885	.32443	2.64118
.799	18.760	1.10400	.47530	.09500	1.19800	-.16030	634.20000	.03897	.05603	.42219	2.17134
.799	21.710	1.14300	.56250	.09970	1.27000	-.16240	634.20000	.02834	.07136	.49611	1.75551
.798	24.740	1.08200	.61700	.10760	1.24100	-.16220	634.20000	.01237	.09523	.53059	1.53408
.800	28.680	1.10900	.72310	.10200	1.32000	-.16270	634.20000	.00760	.09440	.64015	1.33408
GRADIENT	.05586	.00529	-.00161	.05758	-.00401	.00000	.00000	-.00132	-.00029	.00556	.30705





DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NOM. RN/L SEAL EL

(REJ049) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 IN. FT. XMRP = 32.3011 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = 0300 SCALE

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAP = 16.300  
 SFDPRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

## PARAMETRIC DATA

RUN NO. 368/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.900	-1.545	.16840	.10230	.10390	.16740	-.11470	614.00000	.06128	.04362	.05869	1.64588
.899	.085	.20540	.10410	.10380	.20560	-.11900	614.00000	.06156	.04324	.06087	1.97348
.902	1.093	.26660	.11050	.10530	.26870	-.12830	614.00000	.06264	.04266	.06775	2.41510
.900	1.619	.29880	.11370	.10520	.30190	-.13130	614.00000	.06267	.04253	.07117	2.62832
.901	3.598	.42770	.13220	.10510	.43510	-.14930	614.00000	.06228	.04282	.08946	3.23490
.903	5.572	.55050	.15850	.10430	.56330	-.16880	614.00000	.06269	.04161	.11709	3.47322
.901	7.635	.65790	.19450	.10540	.67790	-.17860	614.00000	.06240	.04300	.15192	3.38188
.903	9.579	.72040	.22930	.10590	.74840	-.17140	614.00000	.06152	.04438	.18520	3.14611
.900	12.640	.84700	.30170	.10910	.89250	-.17610	614.00000	.06134	.04776	.25515	2.80688
.900	15.720	.98650	.39940	.11710	1.05800	-.18800	614.00000	.06219	.05491	.34651	2.47064
.900	18.720	1.06800	.49730	.12170	1.19000	-.17990	614.00000	.05855	.06315	.43738	2.18830
.900	21.750	1.12600	.59100	.13160	1.26500	-.14660	614.00000	.04739	.08421	.51277	1.90559
.900	24.750	1.08400	.64610	.13310	1.25500	-.05840	614.00000	.03541	.09769	.55718	1.67859
.901	28.650	1.15200	.76830	.12210	1.37900	-.03990	614.00000	.02562	.09648	.68366	1.49888
	GRADIENT	.06266	.00735	.00034	.06468	-.00840	-.00000	.00053	-.00019	.00756	.38006

RUN NO. 367/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
1.049	-1.574	.15490	.16630	.16790	.15330	-.11820	628.90000	.10335	.06455	.10181	.93158
1.054	.086	.19680	.17130	.17100	.19700	-.12520	628.90000	.10692	.06408	.10722	1.14856
1.055	1.091	.26400	.17790	.17290	.26740	-.13930	628.90000	.10855	.06435	.11362	1.43381
1.055	1.601	.29740	.18110	.17280	.30230	-.14730	628.90000	.10867	.06413	.11707	1.64122
1.053	3.589	.43180	.20460	.17320	.44350	-.17590	628.90000	.10977	.06343	.13731	2.15224
1.051	5.562	.55320	.22740	.17270	.57260	-.19870	628.90000	.10739	.06531	.16239	2.43273
1.052	-1.626	.67010	.26230	.17110	.69890	-.21540	628.90000	.10554	.06556	.19736	2.55403
1.052	9.557	.77580	.30200	.16900	.81520	-.22610	628.90000	.10119	.06781	.23513	2.56895
1.051	12.600	.92490	.38110	.17010	.98570	-.23270	628.90000	.09735	.07275	.31003	2.42727
1.055	15.680	1.04900	.47700	.17570	1.13900	-.23410	628.90000	.09835	.07735	.40252	2.19946
1.051	18.710	1.17900	.58650	.17740	1.30400	-.23870	628.90000	.09521	.08219	.50847	2.00945
1.027	21.740	1.26900	.69520	.17570	1.43700	-.23030	628.90000	.09053	.08517	.61635	1.82571
1.052	24.760	1.30900	.79710	.17570	1.52200	-.19090	628.90000	.08101	.09469	.71100	1.64180
1.050	28.690	1.28400	.89820	.17120	1.55800	-.11840	628.90000	.06759	.10361	.80724	1.43023
	GRADIENT	.06664	.00816	.00111	.06985	-.01405	.00000	.00134	-.00023	.00843	.29344

ARC 11-747 QAS3A B C M F W V NOM. RN/L SEAL EL

(REJ049) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2300 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILERON = .0000 BDFLAP = 16.300  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUP NO. 366/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CNF	CAB	COF	L/D
1.198	-1.590	.13490	.17260	.17400	.13310	-.10690	569.90000	.11532	.05868	.11395	.78140
1.201	.069	.17080	.17470	.17450	.17100	-.11570	569.90000	.11639	.05811	.11660	.97758
1.204	1.071	.23190	.17980	.17540	.23520	-.12910	569.90000	.11747	.05793	.12185	1.28990
1.204	1.611	.26190	.18330	.17590	.26690	-.13550	569.90000	.11751	.05839	.12497	1.42826
1.205	3.564	.37950	.20030	.17630	.39120	-.16150	569.90000	.11745	.05385	.14154	1.89479
1.199	5.530	.49310	.22450	.17600	.51250	-.18420	569.90000	.11637	.05963	.16521	2.13600
1.198	7.648	.61220	.25850	.17470	.64120	-.20370	569.90000	.11417	.06053	.19849	2.36863
1.196	9.569	.71730	.29470	.17140	.75630	-.21690	569.90000	.10873	.06267	.23294	2.43363
1.197	12.620	.88230	.37310	.17130	.94250	-.23470	569.90000	.10553	.06577	.30290	2.36430
1.195	15.690	1.01600	.46610	.17400	1.10400	-.23960	569.90000	.10433	.06967	.39900	2.17950
1.197	18.740	1.12700	.56600	.17370	1.25000	-.24180	569.90000	.10199	.07171	.49818	1.99251
1.198	21.710	1.21000	.66770	.17280	1.37100	-.23270	569.90000	.09733	.07547	.59757	1.81197
1.197	24.680	1.26900	.77090	.17560	1.47500	-.21220	569.90000	.09070	.07990	.69831	1.64616
1.197	28.640	1.30500	.89660	.15950	1.57900	-.17680	569.90000	.07598	.08352	.82350	1.46002
1.194		.05907	.00676	.00057	.06232	-.00311	.00000	.00047	.00009	.00668	.26811

GRADIENT

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L SEAL.EL

(REJ050) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = 16.300  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 365/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.597	-.550	-.04410	.06680	.06630	-.04470	.00830	478.50000	.02753	.03877	.02796	-.66032
.597	-.085	-.01660	.06650	.06650	-.01650	.00850	478.50000	.02673	.03977	.02670	-.24969
.602	1.122	.03330	.06640	.06570	.03460	.00850	478.50000	.02708	.03862	.02775	.50187
.599	1.611	.05630	.06670	.06510	.05820	.00830	478.50000	.02660	.03850	.02823	.84465
.557	3.554	.15150	.06370	.06020	.15560	.00780	478.50000	.02068	.03952	.03028	2.17366
.597	5.500	.24730	.07580	.05150	.25350	.00620	478.50000	.01467	.03683	.03916	3.26196
.597	7.611	.35160	.08680	.03940	.36000	.00360	478.50000	.00061	.03879	.04829	4.05390
.598	9.592	.45490	.10310	.02580	.46580	.00110	478.50000	-.00085	.03565	.06790	4.41496
.600	12.640	.62090	.15280	.01330	.63930	-.00570	478.50000	-.02622	.03952	.11431	4.06154
.596	15.690	.76510	.23100	.01550	.79900	-.01340	478.50000	-.02548	.04098	.19154	3.31188
.600	18.720	.92130	.33520	.02160	.98020	-.02730	478.50000	-.02480	.04640	.29126	2.74861
.598	21.730	1.06100	.44700	.02250	1.15100	-.03110	478.50000	-.03155	.05405	.39683	2.37312
.599	24.710	1.14400	.54700	.01880	1.26800	-.00770	478.50000	-.04248	.06128	.49146	2.09096
.599	28.680	1.01800	.59690	.03530	1.17900	.06880	478.50000	-.04362	.07892	.52756	1.70480
GRADIENT	.04785	.00072	-.00153	-.00153	.04900	-.00014	.00000	-.00159	.00006	.00070	.69399

RUN NO. 364/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	CDF	L/D
.800	-.577	-.04990	.07130	.07080	-.05060	.01340	642.60000	.03124	.03956	.03175	-.69958
.801	.092	-.01920	.07040	.07040	-.01910	.01290	642.60000	.03083	.03957	.03080	-.27304
.800	1.112	.03300	.07030	.06960	.03440	.01190	642.60000	.03172	.03788	.03238	.47033
.800	1.624	.05910	.07050	.06880	.06110	.01130	642.60000	.02826	.04054	.02998	.83861
.797	3.560	.15890	.07420	.06420	.16320	.01020	642.60000	.02594	.03826	.03603	2.14121
.799	5.557	.26710	.08360	.05730	.27390	.00490	642.60000	.01809	.03921	.04453	3.19630
.800	7.601	.37720	.10290	.05210	.38750	-.00140	642.60000	.01405	.03805	.06519	3.66579
.803	9.571	.46790	.13300	.03340	.48350	-.00610	642.60000	.01424	.03916	.09443	3.51671
.799	12.610	.60410	.19060	.03410	.63110	-.01210	642.60000	.01472	.03938	.15215	3.16974
.797	15.680	.74940	.27440	.06160	.79370	-.02600	642.60000	.01711	.04449	.23152	2.73163
.800	18.730	.89350	.37120	.06470	.96540	-.03100	642.60000	.01243	.05227	.32177	2.40659
.796	21.730	.99950	.46950	.06610	1.10200	-.01970	642.60000	.00274	.06336	.41055	2.12871
.798	24.720	1.01200	.54190	.06920	1.14800	.02910	642.60000	-.00669	.07569	.47116	1.86769
.799	28.680	1.01100	.63320	.07080	1.19100	.05900	642.60000	-.01317	.08397	.55966	1.59649
GRADIENT	.05071	.00075	-.00160	-.00160	.05192	-.00079	.00000	-.00135	-.00026	.00103	.69134

ARC 11-747 0453A B C H M V NOM. RN/L SEAL.E.L

(REJ050) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .00000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = 16.3000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 363/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.902	-5.99	-0.4600	.08170	.08130	-0.04680	.01510	615.90000	.03375	.04155	.04124	-56180
.901	.076	-0.04660	.08180	.08180	-0.04640	.01260	615.90000	.04054	.04126	.04052	-110403
.902	1.093	.04760	.08260	.08170	.04320	.02860	615.90000	.04091	.04079	.04184	.57650
.903	1.608	.07400	.08260	.08050	.07620	.04740	615.90000	.04032	.04078	.04245	.89474
.903	3.545	.18110	.09300	.08160	.18650	.08180	615.90000	.04152	.04008	.05297	1.94780
.902	5.550	.27370	.10820	.08070	.28780	.08180	615.90000	.04125	.03945	.06889	2.57633
.903	7.588	.37280	.13010	.07970	.38680	.08120	615.90000	.03908	.04082	.08982	2.86664
.903	9.588	.47000	.16010	.07960	.49010	.08130	615.90000	.03967	.03973	.12095	2.33527
.898	12.590	.60100	.21470	.07850	.63330	.08210	615.90000	.03682	.04188	.17379	2.79967
.901	15.660	.75500	.29870	.08370	.80760	.08290	615.90000	.03621	.04749	.25286	2.50867
.901	18.730	.89590	.39540	.08680	.97540	.08300	615.90000	.03155	.05505	.34308	2.26580
.899	21.720	.99460	.49640	.09200	1.10800	.08230	615.90000	.02411	.06909	.43244	2.00722
.903	24.700	1.01300	.57490	.09920	1.16000	.08130	615.90000	.01091	.08809	.49464	1.76189
.900	28.660	1.06300	.68210	.08880	1.26000	.03980	615.90000	.00173	.08707	.60563	1.55818
GRADIENT	.05471	.00270	.00270	-.00002	.05619	-.00320	.00000	.00036	-.00038	.00307	.60509

RUN NO. 362/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.054	-5.97	-0.3100	.14480	.14450	-0.03260	.02040	629.40000	.08499	.05951	.08532	-21460
1.052	.080	.01030	.14390	.14390	.01050	.01210	629.40000	.08357	.06033	.08358	.07156
1.054	1.093	.07940	.14700	.14540	.08220	.02230	629.40000	.08437	.06103	.08592	.54043
1.054	1.609	.11220	.14890	.14370	.11630	.02870	629.40000	.08523	.06047	.08846	.75324
1.053	3.554	.23580	.16190	.14700	.24530	.03240	629.40000	.08582	.06118	.10086	1.45573
1.050	5.536	.35200	.17850	.14370	.36760	.05230	629.40000	.08242	.06168	.11710	1.97020
1.048	7.609	.46100	.20300	.14320	.48380	.06670	629.40000	.07678	.06342	.14017	2.27152
1.049	9.565	.56100	.23500	.13850	.59230	.07610	629.40000	.07383	.06467	.17122	2.34751
1.050	12.590	.70520	.29710	.13630	.75300	.08400	629.40000	.07057	.06573	.23301	2.37311
1.051	15.670	.86250	.38660	.13930	.93490	.09990	629.40000	.06717	.07213	.31719	2.30086
1.052	18.710	1.01900	.49160	.13880	1.12300	.12000	629.40000	.05969	.07911	.41677	2.07267
1.046	21.720	1.14600	.60490	.13790	1.28800	.12910	629.40000	.05078	.08712	.52382	1.84418
1.050	24.720	1.19500	.70170	.13750	1.37900	.09860	629.40000	.04631	.09119	.61874	1.70350
1.056	28.630	1.22400	.82020	.13320	1.46800	-.06460	629.40000	.03742	.09578	.73624	1.43296
GRADIENT	.06456	.00431	.00431	.00070	.06723	-.01279	.00000	.00036	.00034	.00399	.60509



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

(REJ050) (03 APR 74)

ARC 11-747 QAS3A B C H F W V NOM. RN/L SEAL/EL

REFERENCE DATA

SKRF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
AILRON = .0000 BDFLAP = 16.3000  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = .0000 ELEV-R = .0000

RUN NO. 361/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL	CD	CA	CN	CLMFO	q	CAF	CAB	CDF	L/D
1.201	-1.587	-0.01930	.15310	.15290	-.02030	.00900	570.30000	.09636	.05654	.09657	-1.12626
1.200	.063	.02030	.15310	.15310	.02050	.00030	570.30000	.09594	.05716	.09596	.13277
1.203	1.095	.08340	.15480	.15310	.08640	-.01410	570.30000	.09609	.05701	.09772	.53941
1.203	1.602	.11380	.15690	.15360	.11810	-.02050	570.30000	.09663	.05697	.09989	.72532
1.203	3.543	.22550	.16700	.15280	.23540	-.04330	570.30000	.09588	.05632	.11024	1.34990
1.201	5.525	.33410	.18420	.15120	.35020	-.06320	570.30000	.08753	.03767	.12681	1.81318
1.200	7.589	.44420	.20910	.14860	.46790	-.07940	570.30000	.08981	.05879	.15082	2.12431
1.198	9.573	.54850	.23940	.14490	.58070	-.08810	570.30000	.08422	.06068	.17962	2.29069
1.195	12.610	.69640	.30120	.14200	.74540	-.09780	570.30000	.07810	.06390	.23895	2.31134
1.197	15.670	.84950	.38560	.14180	.92210	-.11600	570.30000	.07505	.06675	.32132	2.20322
1.197	18.700	.97970	.48050	.14100	1.08200	-.12960	570.30000	.07035	.07065	.41354	2.03904
1.196	21.720	1.06900	.57630	.13990	1.20600	-.12380	570.30000	.06428	.07562	.50802	1.85434
1.199	24.700	1.14500	.67770	.13720	1.32300	-.11570	570.30000	.05589	.08131	.60361	1.68952
1.197	28.640	1.23300	.81610	.12550	1.47300	-.10760	570.30000	.04235	.08315	.74319	1.51027
	GRADIENT	.05929	.00346	-.00001	.06207	-.01269	.00000	-.00006	.00004	.00345	.35739

ARC 11-747 QMS3A B C M F W V NOM, RN/L

(REJ051) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0200 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2505 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFAP = -11.700  
 SPOBRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 232/0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.800	-4.937	-.08540	.08280	.08290	-.08530	.07550	481.20000	.04421	.03869	.04421	-1.02895
.801	-2.959	-.09200	.08690	.08710	-.09180	.07900	481.20000	.04707	.04503	.04707	-1.05396
.802	-.972	-.09730	.08780	.08800	-.09710	.07990	481.20000	.04860	.03940	.04860	-1.10341
.803	.027	-.09980	.08760	.08770	-.09970	.07970	481.20000	.04780	.03940	.04780	-1.13663
.804	1.048	-.09560	.08740	.08750	-.09550	.07970	481.20000	.04761	.03869	.04761	-1.09143
.805	3.103	-.09690	.08660	.08680	-.09680	.07660	481.20000	.04590	.04090	.04590	-1.11521
.806	5.163	-.09980	.08510	.08520	-.09970	.07490	481.20000	.04323	.04197	.04323	-1.17019
.807	6.799	-.09270	.08380	.08390	-.09270	.07390	481.20000	.04049	.04331	.04049	-1.10621
GRADIENT	-.00142	.00042	.00042	.00042	-.00142	.00017	-.00000	.00021	.00021	.00021	-.01108

RUN NO. 229/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.800	-4.972	-.09720	.08810	.08820	-.09720	.08690	640.70000	.04736	.04584	.04736	-1.08204
.801	-2.951	-.10500	.09240	.09240	-.10490	.09270	640.70000	.05090	.04150	.05090	-1.13528
.802	-.980	-.11070	.09350	.09360	-.11070	.09490	640.70000	.05391	.03969	.05391	-1.18269
.803	.017	-.11400	.09400	.09410	-.11390	.09550	640.70000	.05345	.04065	.05345	-1.21041
.804	1.043	-.11440	.09330	.09340	-.11430	.09420	640.70000	.05159	.04181	.05159	-1.22377
.805	3.105	-.11190	.09260	.09270	-.11190	.09210	640.70000	.05063	.04207	.05063	-1.25712
.806	5.182	-.11070	.09100	.09100	-.11060	.08930	640.70000	.04763	.04392	.04763	-1.21538
.807	6.666	-.10950	.09090	.09090	-.10940	.09100	640.70000	.04724	.04366	.04724	-1.20352
GRADIENT	-.00200	.00052	.00052	.00052	-.00200	.00064	-.00000	.00040	.00013	.00040	-.01579

RUN NO. 226/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	COF	L/D
.800	-4.958	-.09270	.10030	.10030	-.09260	.09420	613.20000	.05753	.04271	.05753	-.93323
.801	-2.972	-.09820	.10560	.10560	-.09810	.10130	613.20000	.06319	.04241	.06319	-.92898
.802	-.980	-.10310	.10650	.10660	-.10310	.10440	613.20000	.06514	.04146	.06514	-.95717
.803	.028	-.10620	.10680	.10690	-.10610	.10580	613.20000	.06487	.04203	.06487	-.99252
.804	1.040	-.10690	.10770	.10770	-.10680	.10510	613.20000	.06523	.04247	.06523	-.99164
.805	3.122	-.10830	.10690	.10690	-.10820	.10180	613.20000	.06304	.04386	.06304	-1.01216
.806	5.160	-.10980	.10520	.10520	-.10980	.09870	613.20000	.06043	.04477	.06043	-1.04373
.807	6.683	-.11090	.10530	.10530	-.11090	.09840	613.20000	.05792	.04738	.05792	-1.05316
GRADIENT	-.00202	.00077	.00077	.00077	-.00202	.00100	-.00000	.00066	.00011	.00066	-.01284



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NON. RN/L

(REJ051) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDBRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 223/ 0 RN/L = 3.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	W	CAF	CAB	CDF	L/C
1.048	-4.961	-.04500	.16270	.16270	-.04500	.08190	624.20000	.10302	.05968	.10302	-.27658
1.055	-2.972	-.04630	.16860	.16860	-.04620	.08720	624.20000	.10940	.05920	.10940	-.27402
1.052	-.975	-.05400	.16790	.16790	-.05380	.09060	624.20000	.10896	.05894	.10896	.32043
1.051	.014	-.05730	.16770	.16780	-.05720	.09170	624.20000	.10880	.05900	.10880	-.34088
1.049	1.045	-.05640	.16810	.16810	-.05630	.09070	624.20000	.10795	.06015	.10795	-.33492
1.050	3.108	-.05880	.16720	.16720	-.05790	.08870	624.20000	.10691	.06029	.10691	-.34629
1.051	5.176	-.05710	.16830	.16830	-.05710	.08660	624.20000	.10671	.06159	.10671	-.33928
1.049	6.600	-.05580	.16720	.16720	-.05580	.08820	624.20000	.10396	.06324	.10396	-.35766
	GRADIENT	-.04186	.02043	.02043	-.04185	.02090	.00000	.00033	.00009	.00033	-.01034

RUN NO. 220/ 0 RN/L = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	W	CAF	CAB	CDF	L/C
1.202	-4.953	-.03190	.17110	.17120	-.03180	.06860	573.60000	.11490	.05630	.11490	-.18575
1.204	-2.965	-.03530	.17340	.17350	-.03510	.07290	573.60000	.11918	.05432	.11918	-.20231
1.203	-.981	-.03720	.17420	.17420	-.03700	.07430	573.60000	.12045	.05375	.12045	-.21240
1.203	.017	-.04050	.17470	.17470	-.04040	.07470	573.60000	.12061	.05409	.12061	-.23125
1.202	1.049	-.04040	.17510	.17520	-.04020	.07470	573.60000	.12077	.05443	.12077	-.22945
1.202	3.107	-.04280	.17680	.17690	-.04270	.07500	573.60000	.12076	.05614	.12076	-.24138
1.200	5.197	-.04590	.17580	.17580	-.04580	.07590	573.60000	.11951	.05629	.11951	-.26052
1.201	6.637	-.04740	.17450	.17450	-.04740	.07640	573.60000	.11766	.05684	.11766	-.27163
	GRADIENT	-.00137	.02065	.02065	-.00137	.02074	.00000	.00067	-.00002	.00067	-.00708

DATE 06 JUL 74

## TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C M F W V NOM. RN/L

(REJ052) (03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOBRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 233/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.596	-5.039	.40460	.11050	.03790	.41770	.07170	475.40000	.00149	.03641	.07400	3.68454
.596	-3.041	.40400	.11230	.03970	.41740	.07240	475.40000	.00213	.03757	.07457	3.62228
.598	-.987	.39910	.11260	.04100	.41260	.07090	475.40000	.00368	.03732	.07527	3.56362
.597	-.025	.39590	.11250	.04140	.40950	.07090	475.40000	.00415	.03725	.07520	3.54031
.597	1.039	.40100	.11410	.04200	.41480	.07040	475.40000	.00393	.03807	.07590	3.53824
.597	3.057	.40230	.11430	.04240	.41420	.06870	475.40000	.00280	.03960	.07468	3.52341
.597	5.026	.40140	.11310	.04100	.41500	.06750	475.40000	.00021	.04079	.07227	3.57143
.596	7.103	.40050	.11220	.04030	.41400	.06550	475.40000	-.00260	.04290	.06933	3.59132
.597	9.119	.39560	.11260	.04170	.40920	.06530	475.40000	-.00332	.04502	.06779	3.52953
GRADIENT		-.00045	.00037	.00045	-.00037	-.00057	-.00000	.00011	.00034	.00005	-.00594

RUN NO. 230/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.797	-5.038	.41310	.14180	.06710	.43160	.07200	637.80000	.02757	.03953	.10210	2.93129
.802	-3.041	.41070	.14500	.07070	.42980	.07440	637.80000	.03227	.03843	.10642	2.84898
.799	-.995	.40620	.14510	.07160	.42540	.07560	637.80000	.03296	.03864	.10633	2.81947
.797	-.021	.40260	.14450	.07170	.42170	.07650	637.80000	.03210	.03960	.10484	2.80067
.800	1.045	.40460	.14520	.07200	.42380	.07630	637.80000	.03256	.03944	.10566	2.80183
.799	3.077	.40190	.14510	.07250	.42110	.07390	637.80000	.03201	.04049	.10465	2.78237
.797	5.117	.40170	.14290	.07030	.42050	.07170	637.80000	.02815	.04215	.10074	2.82532
.799	7.145	.40350	.14370	.07080	.42240	.07030	637.80000	.02763	.04317	.10056	2.82155
.800	9.161	.40500	.14360	.07050	.42390	.06700	637.80000	.02363	.04687	.09688	2.83093
GRADIENT		-.00137	.00002	.00028	-.00136	-.00004	.00000	-.00006	.00034	-.00029	-.00147

RUN NO. 227/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.905	-5.039	.42230	.17480	.09800	.44640	.06640	619.10000	.05877	.03923	.13539	2.42835
.902	-3.042	.41490	.17440	.09890	.43900	.06950	619.10000	.05876	.04014	.13410	2.39106
.900	-.986	.41010	.17550	.10000	.43450	.07140	619.10000	.06108	.03972	.13560	2.34889
.900	.018	.41160	.17520	.10020	.43600	.07120	619.10000	.06041	.03979	.13520	2.36241
.900	1.036	.41180	.17630	.10140	.43640	.07060	619.10000	.06192	.03946	.13676	2.34664
.901	3.077	.41220	.17580	.10080	.43660	.06770	619.10000	.06192	.03992	.13577	2.35581
.903	5.100	.40870	.17600	.10160	.43320	.06760	619.10000	.05964	.04196	.13396	2.37126
.902	7.148	.40440	.17420	.10070	.42860	.06840	619.10000	.05535	.04475	.12953	2.33072
.899	9.174	.40240	.17280	.10070	.42640	.06600	619.10000	.05243	.04720	.12565	2.31764
GRADIENT		-.00032	.00025	.00031	-.00026	-.00025	-.00000	.00035	-.00004	.00030	-.00531



DATE 06 JUL 74

TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M P M V NOM. RN/L

(REJ052) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 224/0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDP	L/C
1.050	-5.042	.51540	.24810	.15400	.55090	.01020	625.30000	.09182	.06318	.18511	2.08549
1.053	-3.014	.51450	.24780	.15390	.54990	.00890	625.30000	.09343	.06047	.18720	2.08387
1.056	-.983	.51210	.24960	.15620	.54790	.00580	625.30000	.09540	.06080	.18910	2.05830
1.053	.022	.51130	.25020	.15680	.54720	.00700	625.30000	.09534	.06146	.18891	2.05125
1.054	1.029	.51590	.25230	.15810	.55170	.00650	625.30000	.09685	.06125	.19118	2.05115
1.051	3.060	.51470	.25010	.15610	.55050	.00780	625.30000	.09475	.06135	.18890	2.06572
1.054	5.085	.51020	.25140	.15810	.54700	.00850	625.30000	.09391	.06419	.18747	2.03937
1.051	7.115	.50570	.24880	.15650	.54140	.01360	625.30000	.09182	.06468	.18444	2.03920
1.051	9.147	.50410	.24710	.15520	.53960	.01670	625.30000	.08968	.06552	.18202	2.04610
	GRADIENT	.00020	.00047	.00042	.00028	-.00013	-.00000	.00027	.00015	.00031	-.00004

RUN NO. 221/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDP	L/C
1.203	-5.037	.50860	.24910	.15630	.54430	-.01100	571.60000	.09775	.05855	.19078	2.04832
1.205	-3.003	.50770	.24860	.15620	.54340	-.01080	571.60000	.09981	.05619	.19265	2.04869
1.202	-.990	.50680	.24890	.15640	.54250	-.01170	571.60000	.10033	.05607	.19301	2.04288
1.199	.017	.50930	.25020	.15720	.54520	-.01230	571.60000	.10062	.05658	.19376	2.04269
1.196	1.040	.51310	.25170	.15820	.54930	-.01280	571.60000	.10084	.05716	.19469	2.04602
1.198	3.059	.50880	.25270	.15970	.54520	-.01240	571.60000	.10055	.05915	.19369	2.02100
1.200	5.089	.50350	.25220	.16020	.53990	-.00990	571.60000	.10052	.05968	.19274	2.00335
1.198	7.123	.49460	.25040	.16010	.53080	-.00480	571.60000	.10024	.05986	.19089	1.98101
1.202	9.143	.49150	.24910	.15940	.52740	-.00340	571.60000	.09955	.05985	.18962	1.97822
	GRADIENT	.00048	.00075	.00063	.00060	-.00029	.00000	.00013	.00049	.00024	-.00095

(REJ053) (03 APR 74)

ARC 11-747 QAS3A B C M F W V NOM. RM/L

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 AILECON = .0000 BDELAP = -11.7000  
 SPDRK = 55.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 234/ 0 RM/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.599	-5.009	.89330	.36110	.02990	.96310	.04650	479.40000	-.01483	.04473	.31546	2.50294
.597	-2.996	.89380	.36520	.03350	.96500	.04650	479.40000	-.01431	.04781	.31660	2.47655
.598	-.967	.89110	.36510	.03420	.96240	.04610	479.40000	-.01139	.04619	.31789	2.47071
.596	.036	.89220	.36500	.03390	.96340	.04640	479.40000	-.01313	.04703	.31717	2.47319
.597	1.039	.88970	.36450	.03420	.96080	.04600	479.40000	-.01210	.04630	.31724	2.47029
.595	3.081	.88980	.36070	.03080	.95980	.04580	479.40000	-.01472	.04552	.31437	2.48533
.593	5.105	.88480	.35500	.02720	.95290	.04830	479.40000	-.02000	.04720	.30711	2.52121
.601	7.109	.88200	.35330	.02660	.94970	.04600	479.40000	-.02093	.04753	.30515	2.52515
.599	9.149	.89030	.35260	.02330	.95720	.03790	479.40000	-.02574	.04304	.30320	2.55243
GRADIENT	-.00266	-.00070	-.00011	-.00011	-.00011	-.00011	.00000	-.00007	-.00034	-.00036	.00277

RUN NO. 231/ 0 RM/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.796	-5.058	.83970	.38610	.07160	.92140	.06810	636.70000	.02306	.04854	.33681	2.20006
.797	-3.014	.83250	.38720	.07510	.91510	.06980	636.70000	.02441	.05069	.33592	2.17500
.801	-.982	.82570	.38870	.07880	.90820	.07120	636.70000	.02719	.05161	.33651	2.14907
.798	.034	.82580	.38870	.07890	.90930	.06900	636.70000	.02691	.05199	.33629	2.14451
.800	1.061	.82160	.38830	.08020	.90520	.06930	636.70000	.02945	.05055	.33727	2.12957
.796	3.105	.82330	.38490	.07630	.90570	.06810	636.70000	.02589	.04941	.33583	2.16287
.796	5.130	.82460	.37890	.07030	.90470	.06440	636.70000	.02156	.04874	.32968	2.20007
.800	7.181	.82030	.37420	.06760	.89910	.06320	636.70000	.02109	.04651	.32732	2.21478
.799	9.227	.81990	.36680	.06090	.89610	.06140	636.70000	.01302	.04788	.31872	2.25751
GRADIENT	-.00155	-.00036	-.00023	-.00018	-.00018	-.00018	.00000	.00008	-.00024	-.00009	.00227

RUN NO. 228/ 0 RM/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFW	Q	CAF	CAB	CDF	L/D
.900	-5.056	.81270	.40750	.10160	.90340	.06930	615.70000	.01597	.05563	.35218	2.01301
.904	-3.011	.82450	.41670	.10590	.91780	.06370	615.70000	.01481	.05609	.36071	1.99853
.903	-.998	.82660	.41930	.10760	.92060	.06100	615.70000	.01502	.05708	.36234	1.99118
.903	.012	.82210	.41620	.10630	.91530	.06180	615.70000	.01508	.05622	.36011	1.99143
.901	1.045	.81780	.41360	.10550	.91040	.06260	615.70000	.01519	.05411	.35966	1.99607
.899	3.093	.81440	.40800	.10140	.90520	.06430	615.70000	.01492	.05348	.35463	2.01523
.899	5.133	.81770	.40470	.09730	.90720	.06040	615.70000	.014490	.05240	.35247	2.07329
.903	7.185	.82130	.40670	.09240	.90920	.05790	615.70000	.01390	.05220	.34818	2.06833
.901	9.217	.81880	.39140	.08470	.90360	.05720	615.70000	.01322	.05238	.33942	2.11027
GRADIENT	-.00193	-.00157	-.00077	-.00077	-.00077	.00017	.00000	-.00024	-.00053	-.00103	.00272



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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. BN/L

(REJ053) (03 APR 74)

## REFERENCE DATA

REF = 2.4210 SQ.FT. YMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1054 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 OSFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 225/ 0 BN/L = 3.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.055	-5.049	.98880	.51340	.14200	1.10600	-.02420	826.50000	.07119	.07081	.44517	1.93612
1.054	-5.014	.99320	.51940	.14410	1.11100	-.02790	826.50000	.07221	.07189	.44784	1.93001
1.054	-.981	1.01020	.52810	.14430	1.13000	-.03610	826.50000	.07292	.07138	.45501	1.93936
1.054	.010	1.00100	.52270	.14420	1.12000	-.03240	826.50000	.07399	.07021	.45259	1.93444
1.056	1.045	.99740	.52280	.14570	1.11700	-.03030	826.50000	.07314	.07256	.45076	1.92859
1.047	5.076	.98290	.51740	.14580	1.10100	-.01810	826.50000	.07396	.07184	.44607	1.91743
1.052	5.115	.97610	.51120	.14280	1.09300	-.01750	826.50000	.07391	.06859	.44328	1.92689
1.055	7.147	.96680	.50250	.13770	1.06100	-.01490	826.50000	.06897	.06873	.43454	1.94011
1.054	9.193	.96410	.49870	.13530	1.07700	-.01640	826.50000	.06592	.06938	.43030	1.94910
GRADIENT		-.04215	-.02046	.02032	-.00212	.00174	-.00020	.00027	.00005	-.00047	-.00249

RUN NO. 222/ 0 BN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFO	Q	CAF	CAB	COF	L/D
1.197	-5.042	.95300	.50210	.14230	1.06800	-.04310	570.30000	.07710	.06520	.43773	1.91369
1.202	-5.019	.95590	.50430	.14350	1.07100	-.04630	570.30000	.07736	.06594	.43900	1.91112
1.200	-.990	.95670	.50670	.14550	1.07200	-.04630	570.30000	.07879	.06671	.44168	1.90235
1.199	.011	.95880	.50840	.14610	1.07500	-.04640	570.30000	.07963	.06645	.44252	1.90154
1.199	1.049	.95820	.50920	.14750	1.07500	-.04540	570.30000	.08028	.06672	.44311	1.89775
1.196	3.070	.94700	.50560	.14760	1.06300	-.04030	570.30000	.08193	.06667	.43961	1.88826
1.193	5.107	.94000	.49800	.14500	1.05400	-.03420	570.30000	.07827	.06473	.43404	1.90259
1.196	7.148	.93650	.49140	.13750	1.04800	-.03760	570.30000	.07574	.06156	.42961	1.92394
1.199	9.204	.93120	.48440	.13580	1.04100	-.03800	570.30000	.07355	.06025	.42516	1.93547
GRADIENT		-.00121	.00031	.00071	-.00103	.00093	-.00000	.00060	.00011	.00021	-.00060

ARC 11-747 QASSA B C M F M V NOM. RN/L

(REJ555) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10.0000 IN.  
 BREF = 20.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .03500 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BOFLAP = -11.7000  
 SPBRK = 55.0000 RUDDER = .0000  
 ELEV = .0000 ELEV-R = .0000

RUN NO. 352/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.597	-4.933	-.07790	.07995	.06000	-.07780	.07060	479.10000	.04170	.03030	.04170	-.97250
.598	-2.949	-.08150	.08120	.06130	-.08140	.07200	479.10000	.04199	.03331	.04199	-1.04123
.599	.007	-.09140	.08300	.06320	-.09120	.07340	479.10000	.04220	.04100	.04220	-1.09615
.599	3.116	-.09950	.08260	.06270	-.09930	.07160	479.10000	.04116	.04154	.04116	-1.09190
.599	5.166	-.08680	.08200	.06210	-.08670	.07000	479.10000	.03883	.04327	.03883	-1.05603
.599	6.846	-.08490	.07970	.07980	-.08480	.06690	479.10000	.03555	.04425	.03555	-1.06266
GRADIENT	-.02173	.02035	.02036	.02036	-.02171	.00014	-1.00000	-.00016	.00042	-.00006	-0.1650

RUN NO. 349/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.903	-4.945	-.08170	.09780	.09790	-.08160	.08620	613.90000	.05479	.04311	.05479	-.83350
.902	-2.955	-.08500	.09770	.09780	-.08490	.08390	613.90000	.05811	.03969	.05811	-1.01500
.907	.028	-.09660	.09720	.09740	-.09650	.08420	613.90000	.05651	.04009	.05651	-.83076
.903	3.121	-.09340	.09930	.09940	-.09330	.09110	613.90000	.05756	.04184	.05756	-.93063
.906	5.185	-.09590	.09750	.09770	-.09590	.08730	613.90000	.05371	.04339	.05371	-.98150
.901	6.734	-.09070	.09780	.09780	-.09070	.08290	613.90000	.05377	.04003	.05377	-.92740
GRADIENT	-.02168	.02016	.02016	.02016	-.02168	.00054	-1.00000	-.00022	.00026	-.00022	-0.1564

RUN NO. 347/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.201	-4.944	-.02170	.16810	.16810	-.02150	.06150	572.90000	.11071	.05739	.11071	-.02720
1.204	-2.956	-.02400	.15700	.16780	-.02370	.06280	572.90000	.11285	.05495	.11285	-1.04124
1.202	.028	-.02000	.16620	.16670	-.02000	.06470	572.90000	.11340	.05324	.11340	-1.07076
1.199	3.119	-.03210	.16840	.16840	-.03190	.06430	572.90000	.11362	.05478	.11362	-1.09943
1.195	5.180	-.03410	.16810	.16820	-.03390	.06360	572.90000	.11177	.05643	.11177	-2.1055
1.200	6.708	-.03560	.16680	.16580	-.03550	.06270	572.90000	.11036	.05644	.11036	-2.0243
GRADIENT	-.00136	-.00200	.02020	.02020	-.00137	.00037	-1.00000	-.00032	.00032	-.00032	-0.1613

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RM/L

(REJ056) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDELAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 350/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	CL	CD	CA	CN	CLMFLO	Q	CAF	CAB	CD	L/D
.902	-5.034	.42210	.17070	.09420	.44550	.06210	613.00000	.05444	.03976	.13097	2.48267
.903	-3.028	.42650	.17280	.09540	.45020	.06020	613.00000	.05589	.03951	.13322	2.47953
.899	.030	.41550	.16950	.09410	.43880	.06380	613.00000	.05446	.03964	.12983	2.46225
.902	3.076	.42100	.17120	.09490	.44450	.05970	613.00000	.05520	.03970	.13155	2.46868
.898	5.106	.41360	.16860	.09360	.43670	.06230	613.00000	.05202	.04158	.12707	2.46302
.903	7.137	.41940	.16990	.09400	.44270	.05600	613.00000	.05139	.04261	.12748	2.47661
GRADIENT		-.00090	-.00026	-.00008	-.00094	-.00008	.00000	-.00011	.00003	-.00027	-.00178

DATE 06 JUL 74

## TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. RN/L

(REJ057) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = 20.000  
 ELEVON = .000  
 ALLCON = .000  
 BDFLAP = -11.700  
 SPDRK = 55.000  
 RUDDER = .000  
 ELEV-R = .000  
 ELEV-L = .000

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.600	-5.002	.90230	.36200	.02850	.96990	.04410	483.20000	-.01640	.04490	.31631	2.51505
.600	-2.992	.90460	.36480	.02960	.97490	.04300	483.20000	-.01617	.04577	.31824	2.50791
.600	.026	.91130	.36850	.03060	.98250	.04310	483.20000	-.01604	.04664	.32096	2.50222
.599	3.069	.90410	.36240	.02750	.97370	.04380	483.20000	-.01697	.04447	.31708	2.52343
.599	5.095	.89810	.35700	.02460	.96620	.04310	483.20000	-.02089	.04549	.31683	2.54405
.599	7.120	.89730	.35600	.02410	.96510	.04360	483.20000	-.02447	.04857	.30709	2.54771
GRADIENT		-.00009	-.00040	-.00035	-.00020	.00013	-.00000	-.00013	-.00022	-.00019	.00257

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.902	-5.060	.82630	.40510	.09430	.91590	.06330	615.90000	.04043	.05387	.35111	2.06116
.901	-3.017	.83170	.41090	.09820	.92240	.05940	615.90000	.04513	.05307	.35789	2.04334
.902	.034	.84140	.41700	.10050	.93370	.05540	615.90000	.04758	.05292	.36406	2.03734
.899	3.101	.83770	.41350	.09850	.92930	.05720	615.90000	.04281	.05569	.35796	2.04556
.905	5.143	.83510	.41140	.09760	.92580	.05610	615.90000	.04359	.05401	.35760	2.04867
.897	7.185	.83680	.40240	.08870	.92430	.05660	615.90000	.03428	.05442	.34835	2.09828
GRADIENT		.00098	.00042	.00005	.00108	-.00036	-.00000	-.00038	.00043	.00001	.00036

RUN NO. 348/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.200	-5.035	.96310	.49980	.13560	1.07600	-.04890	572.70000	.07204	.06356	.43571	1.94724
1.203	-3.010	.97080	.50520	.13890	1.08620	-.05370	572.70000	.07080	.06810	.43797	1.93841
1.202	.021	.97490	.50630	.13850	1.09000	-.05840	572.70000	.07121	.06729	.43971	1.94233
1.199	3.078	.96900	.50550	.13900	1.08400	-.05570	572.70000	.07237	.06743	.43876	1.93343
1.197	5.122	.95930	.49790	.13620	1.07200	-.05200	572.70000	.07250	.06370	.43478	1.94239
1.199	7.156	.95140	.49150	.13310	1.06300	-.04820	572.70000	.07073	.06237	.43003	1.95107
GRADIENT		-.00030	.00005	.00015	-.00033	.00000	.00000	.00026	-.00011	.00013	-.00082



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TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F M V NOM. RN/L

(REJ058) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 359 / 0 RN/L = 4.00 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.598	-4.343	-.07180	.07500	.07510	-.07170	.06580	479.70000	.03759	.03751	.03759	-.95473
.598	-2.958	-.07720	.07740	.07750	-.07710	.06890	479.70000	.04024	.03726	.04024	-.99484
.596	.019	-.08530	.07910	.07930	-.08520	.06980	479.70000	.04115	.03815	.04115	-1.07440
.596	3.101	-.08690	.07830	.07850	-.08590	.06670	479.70000	.03940	.03910	.03940	-1.09427
.601	5.157	-.08530	.07710	.07720	-.08520	.06580	479.70000	.03526	.04194	.03526	-1.10363
.599	6.732	-.08140	.07600	.07610	-.08130	.06440	479.70000	.03496	.04114	.03496	-1.06833
GRADIENT		-.00183	.00040	.00042	-.00183	.00009	-.00000	.00020	.00022	.00020	-.01818

RUN NO. 356 / 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.901	-4.955	-.07590	.09210	.09220	-.07580	.08010	614.90000	.05349	.03871	.05349	-.82213
.899	-2.975	-.08180	.09390	.09400	-.08170	.08520	614.90000	.05480	.03920	.05480	-.86915
.902	.017	-.09030	.09560	.09560	-.09030	.08920	614.90000	.05682	.03878	.05682	-.94456
.899	3.113	-.09250	.09740	.09740	-.09240	.08800	614.90000	.05676	.04064	.05676	-.94867
.899	5.173	-.09150	.09650	.09650	-.09150	.08420	614.90000	.05340	.04310	.05340	-.94819
.899	6.703	-.09120	.09630	.09630	-.09120	.08290	614.90000	.05245	.04385	.05245	-.94704
GRADIENT		-.00211	.00064	.00063	-.00211	.00097	.00000	.00042	.00020	.00042	-.01637

RUN NO. 354 / 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.200	-4.955	-.01970	.16330	.16330	-.01960	.05590	572.70000	.10713	.05617	.10713	-.12042
1.202	-2.971	-.02310	.16520	.16520	-.02290	.05920	572.70000	.10984	.05536	.10984	-.13862
1.201	.011	-.02690	.16680	.16680	-.02680	.06180	572.70000	.11206	.05474	.11206	-.16067
1.190	3.105	-.03020	.16880	.16880	-.03010	.06260	572.70000	.11200	.05680	.11200	-.17832
1.199	5.173	-.03290	.16910	.16910	-.03280	.06210	572.70000	.11108	.05802	.11108	-.19397
1.197	6.637	-.03410	.16750	.16750	-.03410	.06300	572.70000	.10952	.05798	.10952	-.20358
GRADIENT		-.00129	.00066	.00066	-.00129	.00081	.00000	.00060	.00046	.00060	-.00718

ARC 11-747 0453A B C M F W V NOM. RN/L

(REJ059) ( 03 APR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 357/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFLD	Q	CAF	CAB	CDF	L/D
.901	-5.040	.42650	.16570	.08850	.44900	.05720	616.00000	.05165	.03685	.12884	2.58480
.901	-3.014	.42730	.16780	.09040	.45000	.05740	616.00000	.05208	.03832	.12943	2.55710
.899	.023	.41750	.16640	.09080	.44020	.05990	616.00000	.05239	.03841	.12804	2.51865
.900	3.068	.42260	.16830	.09180	.44560	.05720	616.00000	.05197	.03983	.12856	2.52046
.899	5.101	.41850	.16780	.09200	.44140	.05740	616.00000	.05035	.04165	.12624	2.50354
.900	7.132	.41720	.16740	.09190	.44000	.05730	616.00000	.04843	.04347	.12410	2.50051
	GRADIENT	-.00077	.00008	.00023	-.00072	-.00003	.00000	-.00002	.00025	-.00014	-.00062





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TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F W V NOM. RN/L

(REJ56U) (03 APR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1024 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDELAP = -11.700  
 SPBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 360/ 0 RN/L = 1.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.597	-5.013	.91160	.35830	.02150	.97920	.03840	476.50000	-.02256	.04406	.31371	2.55446
.599	-2.998	.91080	.36210	.02510	.97980	.03860	476.50000	-.01977	.04487	.31603	2.54288
.599	.012	.91400	.36590	.02750	.98420	.03850	476.50000	-.01708	.04458	.32056	2.52565
.597	3.058	.90820	.35930	.02350	.97640	.03720	476.50000	-.02046	.04396	.31473	2.55449
.597	5.081	.90320	.35260	.01910	.96940	.03780	476.50000	-.02523	.04433	.30784	2.58769
.598	7.116	.90220	.35070	.01780	.96780	.03480	476.50000	-.03126	.04906	.30163	2.59781
GRADIENT		-.00043	-.00047	-.00027	-.00057	-.00023	.00000	-.00012	-.00015	-.00030	.00193

RUN NO. 358/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
.902	-5.071	.83240	.40810	-.09530	.92210	.06050	616.30000	.03941	.05589	.35241	2.05906
.900	-3.035	.83690	.41360	-.09890	.92830	.05840	616.30000	.04235	.05855	.35730	2.04294
.901	.017	.84190	.41550	-.09880	.93370	.05250	616.30000	.04556	.05324	.36216	2.04665
.903	3.086	.84020	.41100	-.09530	.93040	.05280	616.30000	.04393	.05137	.35950	2.06615
.902	5.129	.83680	.40520	-.09110	.92530	.05340	616.30000	.03957	.05153	.35366	2.08502
.899	7.181	.83790	.39900	-.08510	.92410	.05360	616.30000	.03359	.05151	.34763	2.11920
GRADIENT		.00054	-.00043	-.00059	.00034	-.00042	.00000	.00026	-.00085	.00036	.00347

RUN NO. 355/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDF	L/D
1.199	-5.041	.96440	.49880	.13580	1.07700	-.05150	573.10000	.07166	.06414	.43569	1.94691
1.201	-3.020	.97040	.50380	.13830	1.08500	-.05540	573.10000	.07288	.06542	.43958	1.94045
1.197	.014	.97380	.50850	.14140	1.08900	-.05540	573.10000	.07345	.06705	.44232	1.92335
1.197	3.074	.96710	.50640	.14190	1.08200	-.05190	573.10000	.07515	.06675	.44068	1.92332
1.198	5.111	.95740	.49740	.13690	1.07000	-.04810	573.10000	.07424	.06266	.43572	1.93821
1.198	7.152	.94890	.48920	.13270	1.05900	-.04650	573.10000	.07210	.06060	.42995	1.95062
GRADIENT		-.00054	.00043	.00059	-.00049	.00058	.00000	.00037	.00022	.00018	-.00281

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(REJ061) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEWON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 343/0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.599	-4.936	-.09780	.10050	.10070	-.09760	.09180	481.40000	.05421	.04649	.05421	-.96922
.598	-2.945	-.10260	.10290	.10310	-.10240	.09480	481.40000	.05651	.04659	.05651	-.93521
.597	.030	-.11230	.10390	.10410	-.11210	.09670	481.40000	.05763	.04647	.05763	-1.07685
.597	3.111	-.11160	.10430	.10450	-.11140	.09560	481.40000	.05670	.04780	.05670	-1.06603
.598	5.168	-.10860	.10240	.10260	-.10840	.09220	481.40000	.05131	.05129	.05131	-1.05653
.600	6.800	-.10360	.09860	.09880	-.10350	.08810	481.40000	.04988	.04892	.04988	-1.04757
GRADIENT	-.00185	-.00044	.00051	.00044	-.00185	.00046	-.00000	.00029	.00015	.00029	-.01360

RUN NO. 340/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
.900	-4.947	-.11310	.11740	.11750	-.11300	.11720	605.90000	.07151	.04509	.07151	-.96170
.904	-2.961	-.11630	.12030	.12050	-.11610	.12350	605.90000	.07399	.04651	.07399	-.96349
.902	.028	-.12540	.12060	.12080	-.12520	.12740	605.90000	.07511	.04569	.07511	-1.03642
.901	3.124	-.12620	.12210	.12220	-.12610	.12520	605.90000	.07346	.04874	.07346	-1.03191
.900	5.181	-.12530	.11890	.11900	-.12520	.11860	605.90000	.06882	.05018	.06882	-1.05210
.900	6.718	-.12100	.11730	.11740	-.12090	.11260	605.90000	.06617	.05123	.06617	-1.02981
GRADIENT	-.00176	.00051	.00051	.00051	-.00176	.00096	.00000	.00023	.00028	.00023	-.01046

RUN NO. 343/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWD	Q	CAF	CAB	CDF	L/D
1.201	-4.945	-.03850	.18700	.18700	-.03830	.08930	573.20000	.12899	.05801	.12899	-.20481
1.201	-2.956	-.04150	.18790	.18820	-.04140	.09260	573.20000	.13198	.05602	.13198	-.22021
1.201	.028	-.04670	.18730	.18750	-.04650	.09460	573.20000	.13355	.05375	.13355	-.24826
1.196	3.120	-.05010	.18850	.18850	-.04990	.09480	573.20000	.13331	.05519	.13331	-.26472
1.204	5.178	-.05130	.18860	.18860	-.05120	.09280	573.20000	.13227	.05633	.13227	-.27147
1.201	6.794	-.05010	.18640	.18640	-.05000	.09100	573.20000	.12860	.05660	.12860	-.26824
GRADIENT	-.00147	.00014	.00014	.00014	-.00146	.00065	-.00000	.00051	-.00037	.00051	-.00761



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NOM. RN/L

(REJ062) (03 APR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 10.000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 341/0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFWO	Q	CAF	CAB	CDF	L/D
.902	-5.031	.40130	.18820	.11500	.42800	.08960	607.20000	.07146	.04354	.14470	2.14064
.900	-3.007	.39860	.18730	.11460	.42520	.09110	607.20000	.06980	.04480	.14257	2.13633
.902	.030	.39420	.18750	.11530	.42590	.09010	607.20000	.07269	.04261	.14467	2.11364
.900	3.078	.39640	.18700	.11470	.42310	.08910	607.20000	.06950	.04564	.14148	2.12819
.898	5.103	.39080	.18550	.11430	.41720	.08910	607.20000	.06729	.04701	.13871	2.11348
.900	7.137	.39260	.18570	.11420	.41900	.08290	607.20000	.06638	.04782	.13813	2.12070
	GRADIENT	-1.00036	-1.00005	.00002	-1.00034	-1.00033	.00000	-1.00012	.00014	-1.00018	-1.00133

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RM/L

(REJ063) ( 03 APR 74 )

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. YMEP = 32.3010 IN.  
 LREF = 14.2440 IN. YMEP = .0000 IN.  
 BREP = 28.1034 IN. ZMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 AIRLON = .0000 BOFLAP = -11.7000  
 SPDRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 346/ 0 RM/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/D
.599	-5.001	.87410	.37340	.04890	.94950	.06830	479.70000	-.00132	.04982	.32351	2.36456
.599	-2.988	.87830	.37550	.04860	.95400	.06680	479.70000	-.00205	.05065	.32436	2.36545
.598	.027	.88570	.38030	.05050	.98260	.06590	479.70000	-.00059	.05109	.32868	2.35550
.597	3.068	.87930	.37550	.04640	.95440	.06760	479.70000	-.00251	.04891	.32407	2.38884
.600	5.094	.87050	.36870	.04500	.94430	.06900	479.70000	-.00379	.04879	.31941	2.38726
.598	7.120	.87310	.36750	.04320	.94630	.06370	479.70000	-.00396	.05306	.31439	2.40071
	GRADIENT	.00019	-.00033	-.00036	.00006	.00013	.00000	-.00008	-.00029	-.00005	.00025

RUN NO. 342/ 0 RM/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/D
.898	-5.056	.80660	.41640	.11190	.92280	.08890	610.40000	.05528	.05652	.36003	1.95627
.903	-3.024	.80790	.42320	.11810	.94440	.08480	610.40000	.06098	.05712	.36663	1.92592
.901	.030	.81330	.42740	.12020	.91080	.08360	610.40000	.06275	.05725	.37048	1.92052
.903	3.105	.81770	.42680	.11800	.91480	.08290	610.40000	.06028	.05772	.36953	1.93332
.903	5.138	.80950	.41890	.11310	.94430	.08230	610.40000	.05624	.05686	.36214	1.95174
.900	7.188	.81550	.41150	.10470	.94740	.07710	610.40000	.04739	.05731	.35488	1.99853
	GRADIENT	.00160	.00059	-.00002	.00170	-.00031	.00000	-.00011	.00010	.00047	.00121

RUN NO. 344/ 0 RM/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL	CD	CA	CN	CLMFD	Q	CAF	CAB	CDP	L/D
1.200	-5.033	.94270	.51010	.15320	1.06100	-.02200	573.20000	.09021	.06299	.44766	1.85372
1.204	-3.013	.94680	.51500	.15850	1.06600	-.02640	573.20000	.08990	.06640	.44917	1.85399
1.202	.027	.95050	.51680	.15670	1.07140	-.02960	573.20000	.08969	.06701	.45058	1.85534
1.199	3.082	.94770	.51590	.15680	1.06800	-.02680	573.20000	.09166	.06614	.45047	1.85315
1.198	5.116	.94150	.51060	.15410	1.06000	-.02480	573.20000	.08930	.06480	.44645	1.85941
1.203	7.157	.93180	.50290	.15010	1.04800	-.02390	573.20000	.08743	.06267	.44060	1.86885
	GRADIENT	.00015	.00015	.00008	.00033	-.00006	.00000	.00013	-.00004	.00023	-.00014



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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NOM. BNVL

(AEJ002) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCA.

WMEP = 32.3010 IN.  
YMEP = .0000 IN.  
ZMEP = 11.2500 IN.

BETA = .000 ELEVON = -10.000  
ATLRON = .000 BOFLAP = -11.700  
SPDRK = 25.000 RUDDER = .000  
ELEV-L = -10.000 ELEV-R = -10.000

## PARAMETRIC DATA

RUN NO. 114/ 0 BNVL = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CELV
.596	-7.08	.14130	.00270	-.00030	-.00340	-.00120	.00020	.80870	476.70000	.00020
.599	.310	.13930	.00150	-.00030	-.00310	-.00200	.00050	.84310	476.70000	.00010
.599	1.361	.13990	.00280	-.00050	-.00310	-.00140	.00030	.89630	476.70000	.00020
.599	1.863	.14090	.00220	-.00040	-.00310	-.00200	.00050	.93260	476.70000	.00010
.600	3.833	.14300	.00200	-.00070	-.00270	-.00160	.00030	1.27500	476.70000	.00020
.599	5.845	.14350	.00160	-.00080	-.00270	-.00170	.00030	-3.99900	476.70000	.00010
.600	7.893	.14430	.00130	-.00090	-.00290	-.00230	.00060	.14940	476.70000	.00010
.598	9.904	.14370	.00110	-.00090	-.00300	-.00260	.00070	.38660	476.70000	.00000
.598	12.960	.14450	.00130	-.00040	-.00320	-.00120	.00020	.49210	476.70000	.00020
.598	16.010	.13430	.00170	-.00140	-.00240	-.00220	.00060	.54270	476.70000	.00010
.598	19.050	.12930	.00220	-.00170	-.00230	-.00340	.00090	.56630	476.70000	-.00010
.599	22.080	.12660	.00270	-.00150	-.00220	-.00340	.00090	.57970	476.70000	.00000
.597	25.080	.14310	.00020	-.00010	-.00280	-.00320	.00090	.57980	476.70000	.00000
.598	28.980	.20180	-.00140	-.00360	.00480	-.00270	.00090	.55640	476.70000	-.00010
	GRADIENT	.00051	-.00007	-.00009	.00014	-.00005	.00001	.10213	.00000	.00000

RUN NO. 113/ 0 BNVL = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CELV
.600	-7.729	.15180	.00190	-.00090	-.00310	-.00010	-.00020	.82430	643.20000	.00040
.601	.427	.14960	.00220	-.00100	-.00300	-.00010	.00010	.87000	643.20000	.00030
.600	1.437	.14790	.00140	-.00090	-.00270	-.00060	.00020	.93380	643.20000	.00030
.600	1.949	.14700	.00140	-.00090	-.00260	-.00070	.00020	.98930	643.20000	.00020
.601	3.910	.14540	.00220	-.00110	-.00240	-.00090	.00020	1.75400	643.20000	.00020
.797	5.919	.14190	.00090	-.00100	-.00250	-.00130	.00020	-.26550	643.20000	.00020
.600	7.976	.13440	-.00070	-.00120	-.00300	-.00060	.00000	.75200	643.20000	.00030
.602	9.951	.12700	-.00100	-.00110	-.00310	-.00040	.00000	.47220	643.20000	.00030
.797	13.070	.13010	-.00090	-.00090	-.00210	-.00080	.00010	.52210	643.20000	.00020
.799	16.070	.13010	-.00140	-.00250	-.00190	-.00090	.00010	.54760	643.20000	.00030
.797	19.190	.14030	-.00640	-.00320	-.00330	.00030	-.00030	.55990	643.20000	.00060
.799	22.240	.16030	-.00790	-.00310	-.00310	-.00060	-.00060	.56210	643.20000	.00090
.600	25.330	.20940	-.00180	-.00520	-.00410	.00040	-.00180	.54530	643.20000	.00170
.600	29.300	.22620	.00600	-.00600	-.00140	.00040	-.00240	.54530	643.20000	.00220
.795		-.00138	.00001	-.00003	.00016	-.00012	.00003	.19744	-.00000	-.00004

ARC 11-747 QAS3A B C M F W V NOM. RN/L (AEJ002) (12 MAR 74)

## REFERENCE DATA

REF = 2.4215 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1084 IN.  
 SCALE = .0305 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 ALLRON = .000 BDFLAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = -10.000 ELEV-R = -10.000

RUN NO. 112/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVY	CYNY	XCF/L	Q	CBLV
.899	-7.14	.17245	.02230	-.00130	-.00310	.00050	-.00050	.84810	614.20000	.00050
.904	.447	.16485	.02260	-.00145	-.00290	.00040	-.00040	.90530	614.20000	.00050
.905	1.471	.15820	.02230	-.00150	-.00290	-.00040	-.00040	.99510	614.20000	.00030
.904	1.956	.15430	.00250	-.00145	-.00310	.00040	-.00040	1.07100	614.20000	.00050
.904	3.892	.13650	.00330	-.00160	-.00270	-.00020	-.00020	76.79000	614.20000	.00040
.903	5.862	.11880	.00220	-.00160	-.00370	.00020	-.00020	.27850	614.20000	.00030
.902	7.910	.10450	.00000	-.00100	-.00290	.00040	-.00040	.47720	614.20000	.00020
.901	9.886	.09500	-.00080	-.00170	-.00170	.00010	-.00010	.53480	614.20000	.00030
.901	12.925	.08890	-.00290	-.00130	-.00160	-.00010	-.00010	.56730	614.20000	.00030
.902	15.990	.08440	-.00070	-.00170	-.00260	.00010	-.00010	.58470	614.20000	.00050
.903	19.070	.09550	-.00140	-.00260	-.00120	-.00060	-.00060	.58800	614.20000	.00060
.899	21.100	.11340	-.00270	-.00230	-.00140	.00010	-.00010	.58420	614.20000	.00100
.904	22.150	.12880	-.00360	-.00260	-.00110	.00030	-.00030	.57930	614.20000	.00110
.901	25.280	.19620	.00940	-.00640	-.00510	.00550	-.00280	.55450	614.20000	.00250
.902	29.500	.20830	.00670	-.00250	-.00110	.00030	-.00030	.55560	614.20000	.00110
GRADIENT		-.00777	.00014	-.00006	.00007	-.00015	.00026	15.84114	.00000	-.00002

RUN NO. 110/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVY	CYNY	XCF/L	Q	CBLV
1.048	-.672	.15550	.00670	-.00210	-.00320	.00130	-.00280	.89210	534.80000	.00060
1.034	.367	.14090	.02480	-.00200	-.00320	.00140	-.00080	.98850	534.80000	.00060
1.034	1.373	.12760	.00450	-.00210	-.00330	.00060	-.00030	1.23800	534.80000	.00050
1.033	1.885	.11930	.00510	-.00210	-.00320	.00100	-.00070	1.74400	534.80000	.00060
1.036	3.620	.09440	.00480	-.00220	-.00310	.00140	-.00090	.25060	534.80000	.00070
1.050	5.766	.08070	.00510	-.00240	-.00240	.00170	-.00100	.48650	534.80000	.00070
1.047	7.106	.06530	.00290	-.00210	-.00240	.00140	-.00090	.55840	534.80000	.00070
1.047	9.763	.05310	.00340	-.00200	-.00160	.00110	-.00080	.58670	534.80000	.00070
1.033	12.820	.03960	.00300	-.00210	-.00050	.00020	-.00050	.60900	534.80000	.00070
1.048	15.840	.03000	.00320	-.00180	-.00080	.00190	-.00050	.61870	534.80000	.00040
1.031	18.890	.01630	.00390	-.00180	.00210	-.00020	-.00010	.62650	534.80000	.00020
1.034	21.900	.00820	.00390	-.00260	.00270	-.00030	-.00030	.63080	534.80000	.00030
1.048	24.990	.05220	.00390	-.00180	.00130	-.00060	-.00010	.61670	534.80000	.00030
1.033	29.060	.10740	.00670	-.00160	.00070	-.00130	-.00020	.60360	534.80000	.00002
GRADIENT		-.01354	-.00032	-.00003	.00002	-.00006	-.00002	-1.10651	.00000	.00002



REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
LREF = 14.2440 IN. YREF = .0000 IN.  
BREF = 20.1004 IN. ZREF = 11.2500 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEWON = -10.000  
AILRON = .000 BDFLAP = -11.700  
SPDRK = 25.000 RUDDER = .000  
ELEV-L = -10.000 ELEV-R = -10.000

RUN NO. 109/ 0 RM/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
1.201	-.672	.11750	.00460	-.00160	-.00260	.00150	-.00080	.89360	564.70000	.00050
1.203	-.279	.10440	.00390	-.00140	-.00260	.00090	-.00030	.99370	564.70000	.00030
1.204	1.302	.09070	.00460	-.00160	-.00270	.00030	-.00020	1.44300	564.70000	.00030
1.205	1.789	.08500	.00470	-.00160	-.00270	.00010	-.00020	3.50300	564.70000	.00020
1.198	3.713	.06350	.00460	-.00170	-.00290	.00010	-.00020	.40490	564.70000	.00030
1.197	5.691	.04830	.00300	-.00180	-.00260	.00020	-.00020	.55170	564.70000	.00020
1.195	7.727	.03480	.00350	-.00170	-.00200	.00080	-.00030	.59470	564.70000	.00030
1.201	9.761	.02110	.00380	-.00180	-.00210	.00020	-.00020	.61350	564.70000	.00030
1.201	12.720	.00930	.00180	-.00280	-.00290	-.00010	-.00010	.62720	564.70000	.00030
1.195	15.790	-.00500	.00310	-.00290	-.00240	-.00040	.00000	.63910	564.70000	.00030
1.197	18.800	-.01660	.00350	-.00080	.00050	-.00030	-.00010	.63620	564.70000	.00010
1.195	21.840	-.01020	.00440	-.00140	.00020	-.00130	.00040	.63240	564.70000	-.00060
1.195	24.870	.00100	-.00100	.00110	.00110	-.00030	.00160	.62370	564.70000	.00000
1.194	28.930	.03200	.00860	-.00180	.00010	-.00190	.00050	.00390	.00000	-.00004
	GRADIENT	-.01185	.00007	-.00004	-.00007	-.00029	.00012			

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C N F M V NOM. RN/L

(AEJ053) (12 MAR 74)

## REFERENCE DATA

SECT = 2.4210 SQ.FT. INSEP = 32.3010 IN.  
 LEOT = 14.2445 IN. THRP = .0000 IN.  
 BLOT = 20.1004 IN. ZNEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.0000  
 AILRON = .0000 BDF LAP = -11.7000  
 SPDRBK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 164 / 0 RN/L = 3.37 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL/F/D	CY	CYN	CBL	CVV	CYV	XP/L	Q	CBLV
.599	-1.521	-0.0260	.00460	-0.00110	-0.00290	-0.00010	-0.00010	.82320	481.40000	.00020
.598	-1.561	-0.0350	.00460	-0.00200	-0.00300	.00030	-0.00020	.82460	481.40000	.00020
.595	.974	-0.0490	.00560	-0.00000	-0.00300	.00000	-0.00010	.76580	481.40000	.00020
.595	1.482	-0.0530	.00500	-0.00110	-0.00290	.00020	-0.00020	.75360	481.40000	.00030
.596	3.426	-0.0730	.00730	-0.00060	-0.00260	.00020	-0.00020	.72240	481.40000	.00030
.597	5.437	-0.0950	.00600	-0.00060	-0.00280	.00020	-0.00020	.70450	481.40000	.00020
.599	7.435	-0.0990	.00600	-0.00060	-0.00280	.00020	-0.00020	.69380	481.40000	.00020
.597	9.471	-0.1040	.00620	-0.00070	-0.00280	.00060	-0.00040	.68830	481.40000	.00030
.598	12.490	-0.1100	.00390	-0.00110	-0.00180	-0.00080	-0.00020	.67960	481.40000	.00000
.598	15.621	-0.1010	.00630	-0.00130	-0.00090	-0.00170	.00050	.67070	481.40000	-0.00010
.597	18.640	-0.1140	.00590	-0.00080	-0.00000	-0.00190	.00000	.66890	481.40000	-0.00010
.596	21.680	-0.0990	.01020	-0.00120	-0.00480	.00020	-0.00020	.66070	481.40000	.00030
.597	24.800	-0.1150	.00610	.00070	.00550	-0.00250	.00010	.63720	481.40000	-0.00050
.598	28.920	.06510	.01150	-0.0430	.00510	.00150	-0.00090	.61270	481.40000	.00050
GRADIENT		-0.0116	.00168	-0.00011	.00009	.00004	-0.00002	-0.02491	.00000	.00003

RUN NO. 163 / 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL/F/D	CY	CYN	CBL	CVV	CYV	XP/L	Q	CBLV
.600	-1.595	-0.07310	.00420	-0.00020	-0.00220	.00010	-0.00060	.84380	641.80000	.00040
.604	-1.032	-0.07390	.00380	-0.00020	-0.00210	.00050	-0.00030	.81230	641.80000	.00030
.601	.925	-0.07780	.00480	-0.00030	-0.00180	-0.00020	-0.00020	.76940	641.80000	.00020
.600	1.438	-0.07950	.00460	-0.00050	-0.00190	.00010	-0.00050	.75570	641.80000	.00040
.796	3.399	-0.06700	.00620	-0.00060	-0.00200	.00000	-0.00040	.72330	641.80000	.00030
.798	5.368	-0.09020	.00610	-0.00060	-0.00210	.00050	-0.00040	.70850	641.80000	.00030
.800	7.419	-0.10760	.00270	-0.00020	-0.00070	.00010	-0.00010	.69920	641.80000	.00020
.799	9.424	-0.10330	.00240	-0.00050	.00000	.00020	-0.00010	.68880	641.80000	.00010
.798	12.480	-0.09430	.00340	-0.00180	.00010	.00180	-0.00070	.67650	641.80000	.00040
.800	15.530	-0.10900	.00170	-0.00060	-0.00080	.00020	-0.00070	.67450	641.80000	.00060
.796	18.630	-0.09670	.00150	-0.00340	-0.00220	.00020	-0.00120	.66510	641.80000	.00090
.796	21.750	-0.05340	.01170	-0.00540	-0.00550	.00030	-0.00260	.64940	641.80000	.00190
.797	24.930	.03280	.00450	-0.00370	-0.00240	.01020	-0.00440	.62220	641.80000	.00310
.797	28.980	.05200	.02360	-0.00890	-0.01190	.00070	-0.00340	.61720	641.80000	.00250
GRADIENT		-0.00371	.00055	-0.00011	.00005	.00001	-0.00002	-0.02920	-0.00000	-0.00001





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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NOM. RN/L

(AEJPR3) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMEF = 32.3010 IN.  
 LREF = 14.2440 IN. YMEF = .0000 IN.  
 BREF = 28.1004 IN. YMEF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVOM = 15.000  
 ALLROM = .000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 162/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVY	CYNV	KCF/L	Q	CBLV
1.053	-0.616	-0.07210	.00430	-.00050	-.00130	.00040	-.00040	.86240	611.10000	.00040
1.054	-0.619	-0.07620	.00400	-.00050	-.00130	.00000	-.00020	.82550	611.10000	.00030
1.055	.914	-.00450	.00460	-.00070	-.00100	.00080	-.00050	.77970	611.10000	.00040
1.056	1.433	-.00720	.00470	-.00080	-.00120	.00050	-.00040	.76570	611.10000	.00040
1.057	3.334	-.00950	.00490	-.00100	-.00090	.00060	-.00040	.73580	611.10000	.00040
1.058	5.332	-.01180	.00320	-.00080	-.00040	.00020	-.00020	.72140	611.10000	.00020
1.059	7.371	-.01250	.00330	-.00060	-.00060	-.00070	-.00010	.70950	611.10000	.00000
1.060	9.404	-.01160	.00220	-.00100	.00050	.00040	-.00030	.69700	611.10000	.00020
1.061	12.440	-.01130	.00240	-.00120	.00050	.00030	-.00050	.68450	611.10000	.00040
1.062	15.500	-.01240	.00400	-.00250	.00060	.00050	-.00070	.68010	611.10000	.00050
1.063	18.570	-.01080	.00450	-.00380	-.00140	.00040	-.00180	.66940	611.10000	.00120
1.064	21.720	-.00820	.00180	-.00250	-.00160	.00110	-.00100	.65270	611.10000	.00080
1.065	24.900	-.02170	.00220	-.00310	-.00110	.00080	-.00200	.62590	611.10000	.00180
1.066	28.090	-.03440	.00000	-.00800	.00030	.00060	-.00400	.62170	611.10000	.00280
GRADIENT		-.00378	.00016	-.00014	.00010	.00010	-.00002	-.00076	.00001	.00001

RUN NO. 161/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVY	CYNV	KCF/L	Q	CBLV
1.053	-0.616	-.06560	.00250	-.00050	-.00010	.00010	-.00050	.88380	627.10000	.00040
1.054	-0.616	-.07110	.00270	-.00060	-.00020	-.00010	-.00020	.83610	627.10000	.00020
1.055	.845	-.00450	.00290	-.00070	-.00010	.00030	-.00030	.79920	627.10000	.00030
1.056	1.482	-.00320	.00330	-.00080	-.00010	.00040	-.00050	.77660	627.10000	.00030
1.057	3.374	-.01020	.00460	-.00120	.00020	.00020	-.00060	.75100	627.10000	.00040
1.058	5.261	-.01020	.00490	-.00110	.00010	.00050	-.00060	.73670	627.10000	.00040
1.059	7.241	-.01570	.00500	-.00140	.00010	.00010	-.00040	.72540	627.10000	.00030
1.060	9.251	-.01620	.00540	-.00160	.00030	.00050	-.00050	.71680	627.10000	.00030
1.061	12.240	-.01740	.00270	-.00030	.00030	-.00010	-.00020	.70340	627.10000	.00020
1.062	15.190	-.01710	.00560	-.00190	.00010	.00030	-.00030	.69300	627.10000	.00030
1.063	18.430	-.01720	.00680	-.00230	.00030	.00020	-.00040	.68490	627.10000	.00040
1.064	21.500	-.01640	.01170	-.00410	.00020	.00010	-.00070	.67760	627.10000	.00060
1.065	24.620	-.01150	.01030	-.00240	-.00030	.00090	-.00070	.66170	627.10000	.00070
1.066	28.730	-.03860	.01080	-.00290	.00010	.00030	-.00170	.64260	627.10000	.00100
GRADIENT		-.01345	.00055	-.00017	.00006	.00017	-.00006	-.00149	.00000	.00002

ARC 11-747 0453A B C M F W Y NOM. RN/L

(AEJ003) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1904 IN.  
 SCALE = .0300 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEWON = 15.0000  
 AIRCON = .0000 BDFLAF = -11.7000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 160/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFND	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.201	-1.653	-1.0590	.00150	-1.00010	-1.00060	.00080	-1.00040	.90970	569.90000	.00030
1.201	-1.190	-1.0630	.00160	-1.00010	-1.00050	.00080	-1.00040	.85530	569.90000	.00030
1.200	.913	-1.0790	.00200	-1.00040	-1.00050	.00090	-1.00050	.80050	569.90000	.00030
1.200	1.436	-1.0860	.00330	-1.00050	-1.00050	.00090	-1.00050	.76660	569.90000	.00030
1.203	3.330	-1.0790	.00370	-1.00070	-1.00010	.00080	-1.00030	.75610	569.90000	.00030
1.200	5.311	-1.1280	.00400	-1.00090	-1.00000	.00040	-1.00030	.73930	569.90000	.00020
1.197	7.350	-1.1460	.00360	-1.00090	-1.00020	.00040	-1.00030	.72790	569.90000	.00020
1.198	9.295	-1.1610	.00480	-1.00110	-1.00040	.00020	-1.00010	.71960	569.90000	.00020
1.196	12.310	-1.1780	.00530	-1.00120	-1.00010	.00020	-1.00020	.70840	569.90000	.00020
1.199	15.380	-1.1860	.00550	-1.00150	-1.00020	.00020	-1.00020	.69880	569.90000	.00020
1.195	18.430	-1.1960	.00720	-1.00210	-1.00020	.00050	-1.00030	.69070	569.90000	.00030
1.186	21.470	-1.1760	.01070	-1.00310	-1.00050	.00100	-1.00050	.68240	569.90000	.00050
1.194	24.530	-1.1420	.01140	-1.00300	-1.00080	.00080	-1.00040	.67540	569.90000	.00040
1.192	28.620	-1.1040	.01000	-1.00230	-1.00210	.00100	-1.00050	.65840	569.90000	.00060
	GRADIENT	-1.01217	.00061	-1.00016	.00012	.00090	-1.00000	-1.03645	.00000	.00000



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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L

(AEJ0004) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

BETA = .000  
 AIRRON = 5.000  
 SPOBCK = 25.000  
 ELEV-L = 5.000

ELEVON = .000  
 BDFLAP = -11.700  
 RUDDER = .000  
 ELEV-R = -5.000

## PARAMETRIC DATA

RUN NO. 119/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.597	-1.653	.05260	-.01210	.00400	.01620	-.00230	.00280	-.81270	476.50000	-.00050
.599	.171	.05250	-.01320	.00400	.01620	-.00280	.00100	.90050	476.50000	-.00060
.600	1.203	.05220	-.01250	.00410	.01660	-.00320	.00110	1.49800	476.50000	-.00060
.600	1.712	.05180	-.01410	.00430	.01680	-.00290	.00100	-6.85900	476.50000	-.00060
.601	3.695	.05270	-.01370	.00420	.01740	-.00310	.00110	.43510	476.50000	-.00060
.600	5.760	.05170	-.01480	.00420	.01760	-.00290	.00100	.53780	476.50000	-.00060
.598	7.749	.04550	-.01500	.00400	.01800	-.00260	.00110	.57230	476.50000	-.00070
.598	9.751	.04650	-.01530	.00380	.01810	-.00230	.00100	.59090	476.50000	-.00050
.598	12.770	.04200	-.01540	.00420	.01990	-.00250	.00100	.60620	476.50000	-.00060
.600	15.830	.03550	-.01240	.00420	.01580	-.00420	.00150	.61500	476.50000	-.00080
.597	18.910	.02690	-.01180	.00230	.01630	-.00390	.00150	.62180	476.50000	-.00080
.598	21.940	.02980	-.00970	.00230	.01540	-.00340	.00140	.62240	476.50000	-.00080
.599	24.980	.06280	-.00740	.00170	.01120	-.00290	.00120	.61260	476.50000	-.00060
.598	28.980	.13930	-.01110	-.00440	.01170	-.00240	-.00120	.58500	476.50000	-.00090
	GRADIENT	-.00220	-.00034	.00006	.00030	-.00016	.00006	-.43475	.00000	-.00002

RUN NO. 118/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.801	-1.666	.06010	-.01220	.00470	.01570	-.00300	.00100	.82930	638.60000	-.00050
.802	.219	.05930	-.01240	.00480	.01560	-.00270	.00100	.95560	638.60000	-.00050
.803	1.269	.05840	-.01250	.00460	.01590	-.00220	.00080	2.13200	638.60000	-.00050
.800	1.764	.05820	-.01200	.00460	.01610	-.00270	.00100	-1.34500	638.60000	-.00050
.799	3.723	.05660	-.01290	.00440	.01700	-.00250	.00070	.44970	638.60000	-.00040
.797	5.728	.05280	-.01390	.00420	.01770	-.00270	.00100	.54540	638.60000	-.00060
.800	7.784	.04640	-.01520	.00400	.01750	-.00210	.00080	.58240	638.60000	-.00060
.800	9.799	.04420	-.01440	.00380	.01640	-.00190	.00080	.59550	638.60000	-.00050
.801	12.870	.04610	-.01260	.00250	.01310	-.00110	.00050	.60300	638.60000	-.00030
.800	15.880	.03730	-.01310	.00150	.01590	-.00160	.00080	.61360	638.60000	-.00040
.800	18.990	.03940	-.01210	-.00020	.01440	-.00080	.00050	.61610	638.60000	-.00020
.801	22.100	.06350	-.00640	-.00270	.01240	-.00120	-.00050	.60920	638.60000	-.00050
.798	25.130	.12430	-.02380	-.01030	.00310	-.01080	-.00080	.58750	638.60000	-.00030
.797	29.190	.14550	-.02750	-.00910	.00840	-.00580	-.00290	.58340	638.60000	-.00220
	GRADIENT	-.00079	-.00013	-.00008	.00002	-.00002	-.00007	-.19334	.00000	-.00002

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C H F M V NOM. RN/L

(AEJ004) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0020 IN.  
 BREF = 28.1024 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = 5.000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 5.000 ELEV-R = -5.000

RUN NO. 117/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.899	-.671	.06580	-.01650	.02650	.01510	-.00340	.00120	.84050	614.20000	-.00060
.903	.215	.06330	-.01680	.00640	.01460	-.00380	.00140	.98710	614.20000	-.00080
.902	1.246	.05860	-.01380	.02600	.01420	-.00330	.00120	4.22600	614.20000	-.00060
.898	1.763	.05690	-.01470	.00550	.01410	-.00330	.00110	-.17980	614.20000	-.00060
.906	3.688	.04640	-.01480	.00520	.01250	-.00270	.00090	.51600	614.20000	-.00050
.905	5.684	.03750	-.01410	.00440	.01080	-.00260	.00090	.57820	614.20000	-.00050
.902	7.722	.03250	-.01360	.00490	.01340	-.00200	.00070	.59950	614.20000	-.00040
.901	9.720	.03180	-.01180	.00380	.01310	-.00130	.00050	.60670	614.20000	-.00030
.901	12.770	.02570	-.00890	.00340	.01250	-.00080	.00030	.61690	614.20000	-.00010
.902	15.820	.01550	-.00730	.00130	.01380	-.00030	.00010	.62510	614.20000	-.00000
.899	18.930	.02730	-.00190	-.00210	.01400	.00160	-.00060	.62140	614.20000	.00060
.897	22.010	.05370	.00480	-.00370	.01100	.00210	-.00120	.61280	614.20000	.00110
.900	25.110	.11470	.02950	-.01180	.00500	.00360	-.00470	.59220	614.20000	.00350
.900	29.160	.13250	.03100	-.00820	.00900	.00410	-.00240	.59060	614.20000	.00200
GRADIENT		-.00450	.00049	-.00033	-.00058	.00020	-.00209	-.13451	-.00000	.00004

RUN NO. 116/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.050	-.649	.06140	-.00710	.00420	.01370	.00100	-.00050	.92020	627.90000	-.00050
1.052	.190	.05220	-.00700	.00410	.01360	.00030	-.00030	1.39500	627.90000	-.00030
1.052	1.209	.03860	-.00600	.00370	.01330	.00090	-.00050	.32720	627.90000	.00040
1.053	1.699	.03280	-.00690	.00370	.01290	.00030	-.00030	.47960	627.90000	.00030
1.050	3.617	.01270	-.00580	.00310	.01220	.00100	-.00060	.60970	627.90000	.00050
1.050	5.585	-.00670	-.00550	.00260	.01270	.00070	-.00050	.64030	627.90000	.00040
1.047	7.640	-.02050	-.00670	.00300	.01400	.00010	-.00030	.64920	627.90000	.00030
1.049	9.598	-.02850	-.00700	.00390	.01450	.00010	-.00010	.65180	627.90000	.00010
1.046	12.630	-.03910	-.00480	.00250	.01510	-.00190	.00100	.65270	627.90000	-.00040
1.048	15.690	-.04790	.00120	-.00040	.01540	-.00010	.00010	.65250	627.90000	.00000
1.048	18.740	-.05790	.00450	-.00170	.01540	-.00080	.00020	.65270	627.90000	.00010
1.051	21.760	-.05810	.00990	-.00370	.01320	-.00010	-.00010	.65040	627.90000	.00040
1.046	24.860	-.01750	.00590	-.00240	.01290	-.00080	.00030	.63770	627.90000	.00010
1.053	28.960	.03460	.02490	-.00790	.00620	.00110	-.00060	.62330	627.90000	.00100
GRADIENT		-.01153	.00030	-.00026	-.00037	.00004	-.00003	-.13714	.00000	.00001



DATE 06 JUL 74

TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F M V NOM. RN/L

(AEJ004) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA = .000 ELEVON = .000  
 AILRON = 5.000 BDFLAP = -11.700  
 SPDGRK = 25.000 RUDDER = .000  
 ELEV-L = 5.000 ELEV-R = -5.000

## PARAMETRIC DATA

RUN NO. 115/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.202	-662	.04475	-.00275	.00240	.01090	.00060	-.00040	.90450	567.10000	.00030
1.200	.132	.03510	-.00240	.00220	.01060	-.00010	-.00010	1.73100	567.10000	.00020
1.200	1.132	.02230	.00010	.00170	.01040	.00050	-.00030	.47520	567.10000	.00030
1.199	1.645	.01690	-.00140	.00160	.01040	.00070	-.00040	.55640	567.10000	.00030
1.195	3.560	-.00330	-.00140	.00110	.01020	.00070	-.00040	.63890	567.10000	.00030
1.199	5.525	-.00240	-.00030	.00060	.01050	.00070	-.00040	.65930	567.10000	.00030
1.199	7.574	-.03500	.00040	.00040	.01110	.00020	-.00020	.66310	567.10000	.00030
1.197	9.554	-.04500	.00100	.00090	.01180	.00030	-.00020	.66360	567.10000	.00030
1.198	12.570	-.05660	-.00230	.00150	.01320	-.00020	.00000	.66230	567.10000	.00020
1.197	15.640	-.06820	.00110	.00000	.01230	-.00090	.00030	.66140	567.10000	.00000
1.198	18.680	-.07780	.00430	-.00160	.01220	-.00090	.00020	.66050	567.10000	.00010
1.195	21.710	-.07050	.00900	-.00330	.01170	-.00020	.00000	.65520	567.10000	.00020
1.198	24.750	-.05710	.00300	-.00130	.01280	-.00250	.00130	.64930	567.10000	-.00060
1.196	28.790	-.02660	.01990	-.00630	.00840	.00210	-.00150	.63980	567.10000	.00120
GRADIENT		-.01138	.00033	-.00032	-.00015	.00010	-.00003	-.15924	.00000	.00001

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1934 IN.  
SCALE = .0390 SCALE

## PARAMETRIC DATA

BETA	=	.0000	ELEVON	=	-10.0000
AILRON	=	5.0000	BDFLAP	=	-11.7000
SFCBRK	=	25.0000	RUDDER	=	.0000
ELEV-L	=	-5.0000	ELEV-R	=	-15.0000

RUN NO. 159 / G 1 / L = 3.99 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLAMPD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.600	-.704	.13400	-.00830	.00460	.01200	-.00190	.00040	-.81020	483.20000	-.00030
.605	.307	.13345	-.00910	.00450	.01190	-.00200	.00070	-.84540	483.20000	-.00050
.610	1.336	.13360	-.00910	.00450	.01180	-.00220	.00070	-.90270	483.20000	-.00050
.598	1.842	.13370	-.00820	.00450	.01160	-.00190	.00060	-.94340	483.20000	-.00040
.598	3.732	.13480	-.00920	.00430	.01170	-.00180	.00060	1.35800	483.20000	-.00050
.597	5.804	.13480	-.01050	.00420	.01190	-.00210	.00070	-1.13100	483.20000	-.00050
.597	7.861	.13530	-.01020	.00420	.01240	-.00260	.00090	.24310	483.20000	-.00050
.598	9.863	.13610	-.01140	.00430	.01260	-.00250	.00090	.41680	483.20000	-.00060
.598	12.900	.13470	-.01410	.00480	.01270	-.00280	.00100	.50670	483.20000	-.00060
.597	15.970	.12780	-.01180	.00740	.01340	-.00250	.00100	.54900	483.20000	-.00070
.599	19.020	.12550	-.01120	.00900	.01400	-.00330	.00140	.56830	483.20000	-.00090
.598	22.050	.12410	-.01050	.00930	.01310	-.00320	.00120	.58110	483.20000	-.00070
.597	25.070	.14030	-.01980	.00340	.01180	-.00270	.00110	.58140	483.20000	-.00060
.597	28.070	.19610	.01590	.00340	.01310	.00210	-.00070	.55890	483.20000	-.00060
.598	GRADIENT	.00021	-.00012	-.00006	-.00007	-.00007	.00003	.12115	483.20000	-.00003

RUN NO. 158/5 RMV = 4.21 GRACIENT INTERVAL = -5.00/5.00

MACH	ALPHA	CLINF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.805	-.722	.14693	-.00830	.00520	.01070	-.00130	.00240		640.60000	-.00020
.802	.412	.14450	-.00100	.00150	.01060	-.00190	.00260	.87320	640.60000	-.00040
.802	1.429	.00950	-.00950	.00510	.01060	-.00160	.00250	.94270	640.60000	-.00004
.802	1.919	.14210	-.00980	.00500	.01050	-.00080	.00230	.99470	640.60000	-.00020
.801	3.882	.14110	-.00970	.00480	.00990	-.00200	.00260	1.83200	640.60000	-.00040
.801	5.915	.13780	-.01020	.00460	.00930	-.00200	.00270	1.10120	640.60000	-.00050
.798	7.939	.13150	-.01090	.00410	.00770	-.00190	.00260	.36490	640.60000	-.00040
.799	9.935	.12350	-.01230	.00330	.00560	-.00160	.00250		640.60000	-.00030
.799	12.932	.12320	-.01190	.00250	.00470	-.00070	.00220	.53040	640.60000	-.00010
.798	16.960	.12030	-.01290	.00150	.00230	-.00020	.00210	.53630	640.60000	-.00003
.798	19.120	.12820	-.01300	.00090	.00190	-.00000	.00200	.56350	640.60000	-.00003
.796	22.190	.14590	-.01120	.00020	.0010	-.00000	.00200	.57110	640.60000	-.00002
.797	25.310	.20270	-.00270	-.00270	.00610	.00050	-.00010	.54930	640.60000	-.00180
.799	29.250	.21610	.00710	-.00710	.00700	.00620	-.00220	.55930	640.60000	-.00230
GRADIENT		-.00125	-.00020	-.00011	-.00017	-.00008	.00002	.02773	640.60000	-.00001

(AEJ005) ( 12 MAR 74 )

ARC 11-747 QAS3A B C M F W V NOM. RN/L

PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AIRLON = 5.000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -5.000 ELEV-R = -15.000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 157/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.905	-7.10	.16710	-.01410	.00740	.01300	-.00210	.00370	.85060	616.70000	-.00050
.903	.402	.16130	-.01280	.00690	.01310	-.00310	.00100	.90780	616.70000	-.00070
.902	1.403	.15510	-.01400	.00680	.01300	-.00290	.00090	1.00400	616.70000	-.00060
.904	1.939	.15060	-.01370	.00660	.01300	-.00250	.00080	1.09400	616.70000	-.00060
.903	3.857	.13590	-.01210	.00570	.01160	-.00240	.00070	.00000	616.70000	-.00050
.901	5.796	.11720	-.01470	.00540	.00930	-.00230	.00080	.28680	616.70000	-.00050
.899	7.819	.10480	-.01490	.00490	.00850	-.00160	.00040	.47250	616.70000	-.00040
.902	9.830	.09410	-.01460	.00440	.00450	-.00100	.00040	.53520	616.70000	-.00030
.902	12.860	.08200	-.01340	.00420	.00240	-.00100	.00040	.57350	616.70000	-.00020
.899	15.930	.07980	-.00860	.00250	.00210	-.00010	-.00010	.58760	616.70000	-.00010
.900	19.040	.09190	-.00380	-.00230	.00540	.00160	-.00070	.59010	616.70000	-.00050
.899	22.090	.12550	-.00280	-.00260	.02640	.00300	-.00140	.58120	616.70000	-.00090
.903	25.230	.18490	.02210	.00460	.00260	.00920	-.00450	.56090	616.70000	-.00160
.901	29.280	.20040	.02150	-.00400	.00530	.00260	-.00170	.56310	616.70000	-.00120
GRADIENT		-.00689	.00033	-.00036	-.00030	-.00020	-.00002	-.17114	.00000	.00001

RUN NO. 156/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.054	-6.77	.15340	-.02240	.01130	.01220	-.00660	.00290	.89210	627.80000	-.00180
1.058	.342	.13660	-.02210	.01110	.01140	-.00800	.00340	.98610	627.80000	-.00210
1.055	1.359	.12270	-.02290	.01100	.01090	-.00720	.00320	1.25300	627.80000	-.00200
1.055	1.890	.11520	-.02190	.01080	.01060	-.00730	.00320	1.81000	627.80000	-.00200
1.054	3.771	.09220	-.02150	.01050	.00960	-.00710	.00320	.25400	627.80000	-.00200
1.050	5.771	.07350	-.02140	.01010	.00900	-.00660	.00320	.50590	627.80000	-.00200
1.050	7.756	.05960	-.02270	.01020	.00810	-.00630	.00320	.56600	627.80000	-.00200
1.052	9.724	.04800	-.02000	.00990	.00740	-.00590	.00310	.59290	627.80000	-.00190
1.048	12.750	.03530	-.01100	.00650	.00730	-.00200	.00120	.61170	627.80000	-.00070
1.050	15.820	.02420	-.00620	.00460	.00910	-.00100	.00040	.62150	627.80000	-.00010
1.048	18.870	.01370	-.00630	.00440	.01050	-.00140	.00060	.62750	627.80000	-.00020
1.050	21.900	.00400	-.01180	.00690	.01190	-.00380	.00190	.63140	627.80000	-.00100
1.049	24.930	.00430	.00280	.00230	.00880	-.00200	.00080	.61890	627.80000	-.00040
1.052	29.040	.00650	.01790	-.00350	.00450	-.00040	.00020	.60480	627.80000	-.00030
GRADIENT		-.01366	.00019	-.00018	-.00037	-.00002	.00004	-.10033	.00000	-.00003

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOM. RW/L

(AEJ005) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 ALLRON = 5.000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -5.000 ELEV-R = -15.000

RUN NO. 155/ 0 RW/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFND	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.195	-1.675	.11940	-.01630	.00960	.00910	-.00400	.00200	.89350	568.40000	-.00110
1.200	-.282	.10420	-.01630	.00930	.00910	-.00280	.00150	.98900	568.40000	-.00080
1.204	1.274	.08950	-.01560	.00870	.00910	-.00200	.00100	1.39000	568.40000	-.00050
1.201	1.720	.08500	-.01590	.00860	.00920	-.00180	.00100	2.53700	568.40000	-.00040
1.201	3.653	.06200	-.01340	.00790	.00950	-.00060	.00020	.41420	568.40000	.00000
1.203	5.622	.04350	-.01420	.00730	.01000	.00000	-.00010	.55930	568.40000	.00020
1.203	7.691	.03030	-.01500	.00720	.00970	-.00010	-.00010	.59920	568.40000	.00020
1.199	9.630	.02030	-.01990	.00610	.00840	-.00010	-.00010	.61590	568.40000	.00010
1.193	12.670	.00760	-.01830	.00490	.00830	-.00060	.00010	.62820	568.40000	.00000
1.198	15.720	-.00930	-.01410	.00310	.00840	-.00000	.00030	.63700	568.40000	.00000
1.198	18.770	-.02040	-.00240	.00240	.00980	-.00100	.00050	.64060	568.40000	.00000
1.194	21.810	-.01690	-.00160	.00210	.00940	-.00140	.00050	.63840	568.40000	-.00010
1.196	24.830	-.00330	.00450	-.00060	.00800	-.00310	.00130	.63370	568.40000	-.00050
1.197	28.860	.02350	.01170	-.00260	.00650	-.00040	.00010	.62620	568.40000	.00020
	GRADIENT	-.01316	.00067	-.00040	.00019	.00076	-.00041	-.04336	.00000	.00025



DATE 08 JUL 74

TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C M F W V RN/L = 3.0

(AEJ006) ( 12 MAR 74 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. DRPF = 32.3510 IN.  
 LREF = 14.2440 IN. DRPF = .0000 IN.  
 BREF = 28.1054 IN. DRPF = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = 7.500  
 ALLRON = -7.500 BDEFAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 108/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYVY	XCP/L	Q	CBLV
.600	-.627	-.01450	.02370	-.00400	-.02890	-.00080	-.00010	.80380	353.50000	.00090
.605	-.070	-.01530	.02140	-.00410	-.02910	-.00070	.00020	.72710	353.50000	.00070
.609	1.614	-.01500	.02300	-.00450	-.02990	-.00110	-.00010	.67340	353.50000	.00080
.617	3.567	-.01620	.02600	-.00470	-.03080	.00000	-.00040	.65850	353.50000	.00110
.619	5.563	-.01700	.02710	-.00480	-.03150	-.00050	-.00030	.65180	353.50000	.00090
.619	7.632	-.02140	.02650	-.00480	-.03210	-.00070	-.00020	.65080	353.50000	.00090
.619	9.628	-.02480	.02590	-.00480	-.03220	-.00080	-.00040	.64950	353.50000	.00100
.619	12.650	-.03120	.02990	-.00500	-.03090	-.00080	-.00020	.64870	353.50000	.00100
.619	15.730	-.03120	.02690	-.00470	-.02670	-.00010	.00010	.64610	353.50000	.00070
.619	18.790	-.04270	.03100	-.00510	-.02510	-.00090	.00010	.64800	353.50000	.00080
.619	21.790	-.03180	.02900	-.00370	-.02180	-.00120	.00010	.64280	353.50000	.00090
.619	24.820	-.01970	-.00030	-.00070	-.00830	-.00690	.00220	.62670	353.50000	-.00050
.619	28.780	-.10280	-.01230	-.00290	-.00490	-.00730	.00250	.59930	353.50000	-.00100
	GRADIENT	-.00033	.00075	-.00017	-.00047	.00027	-.00010	-.03152	.00000	.00006

RUN NO. 107/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYVY	XCP/L	Q	CBLV
.620	-.627	-.00470	.02040	-.00380	-.02630	-.00030	-.00040	1.09800	446.10000	.00090
.627	.085	-.00510	.02010	-.00380	-.02650	-.00070	-.00020	.68180	446.10000	.00080
.793	1.621	-.00430	.02130	-.00400	-.02780	-.00030	-.00030	.65820	446.10000	.00100
.798	3.575	-.01130	.02310	-.00450	-.02950	.00050	-.00070	.65090	446.10000	.00120
.805	5.554	-.01390	.02490	-.00510	-.03150	.00070	-.00070	.65390	446.10000	.00120
.820	7.620	-.02420	.02300	-.00480	-.03010	.00050	-.00070	.65230	446.10000	.00090
.820	9.608	-.02270	.02250	-.00510	-.02520	.00000	-.00040	.64830	446.10000	.00110
.821	12.660	-.02220	.02230	-.00540	-.02610	.00020	-.00030	.64480	446.10000	.00110
.822	15.710	-.03350	.01770	-.00440	-.02590	.00010	-.00060	.64760	446.10000	.00110
.799	18.770	-.02830	.01360	-.00360	-.02340	.00020	-.00050	.64340	446.10000	.00070
.799	21.850	-.00320	-.00030	-.00000	-.01800	-.00150	.00010	.63100	446.10000	-.00060
.799	24.930	.07490	-.01810	.00100	-.00940	-.00540	-.00070	.60710	446.10000	-.00060
.799	28.950	.10350	-.00810	-.00040	-.01120	-.00090	-.00010	.59940	446.10000	.00000
	GRADIENT	-.00165	.00070	-.00017	-.00079	.00023	-.00009	-.07992	.00000	.00008

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M Y RN/L = 3.0

(AE 0006) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 26.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 7.500  
 AIRRON = -7.500 BDFLAF = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 106/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMC	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.032	-0.636	-0.0210	.02070	-0.0410	-0.0290	.00040	-0.0070	.88230	488.10000	.00110
1.037	-0.639	-0.02540	.01830	-0.04420	-0.02310	.00020	-0.00760	.67660	488.10000	.00100
1.046	1.589	-0.01500	.02000	-0.04400	-0.02600	.00030	-0.00390	.67260	488.10000	.00110
1.054	3.539	-0.02400	.02420	-0.05380	-0.02880	.00140	-0.00110	.66760	488.10000	.00130
1.055	5.340	-0.02960	.02510	-0.05660	-0.03170	.00160	-0.00120	.66310	488.10000	.00130
1.054	7.591	-0.03990	.01990	-0.05520	-0.02820	.00050	-0.00070	.66410	488.10000	.00100
1.054	9.566	-0.03750	.01540	-0.05390	-0.02590	-0.00060	-0.00020	.65750	488.10000	.00070
1.053	12.610	-0.04320	.00990	-0.05170	-0.02360	-0.00120	-0.00020	.65560	488.10000	.00060
1.057	15.680	-0.05190	.02670	-0.05060	-0.02250	-0.00050	-0.00020	.65480	488.10000	.00070
1.056	18.750	-0.03750	.00130	-0.05030	-0.01850	-0.00080	-0.00000	.64670	488.10000	.00060
1.056	21.820	-0.02950	.01620	-0.05310	-0.01250	-0.00020	-0.00050	.63660	488.10000	.00020
1.055	24.930	-0.02900	.00320	-0.05200	-0.00740	-0.00070	-0.00220	.60990	488.10000	-0.00070
1.054	26.950	-0.04890	-0.0310	-0.05110	-0.01170	.00120	-0.00100	.60580	488.10000	.00100
1.059	GRADIENT	-0.0534	.00104	-0.0540	-0.0292	.00028	-0.00011	-0.03790	.00000	.00006

RUN NO. 105/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMC	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.055	-0.630	-0.02250	.02270	-0.04220	-0.02370	-0.00260	-0.0060	.52230	537.80000	.00010
1.054	1.128	-0.02700	.00180	-0.04230	-0.02400	-0.00310	-0.0030	.67950	537.80000	.00000
1.055	1.823	-0.02890	.00300	-0.04250	-0.02390	-0.00250	-0.0060	.63500	537.80000	.00010
1.055	3.982	-0.03340	.00380	-0.04250	-0.02430	-0.00320	-0.0060	.69580	537.80000	.00000
1.055	6.190	-0.07490	.00270	-0.04260	-0.02420	-0.00260	-0.0060	.69410	537.80000	.00010
1.051	8.389	-0.07950	.00730	-0.04130	-0.02690	-0.00330	-0.0070	.66870	537.80000	.00000
1.050	10.580	-0.09500	.01190	-0.04040	-0.02640	-0.00190	-0.0010	.66310	537.80000	.00040
1.052	13.480	-0.10200	.01370	-0.04070	-0.02400	-0.00110	-0.0040	.67580	537.80000	.00090
1.052	17.240	-0.11170	.01290	-0.04000	-0.02110	-0.00140	-0.0020	.67130	537.80000	.00000
1.053	20.510	-0.11920	.00630	-0.04240	-0.01740	-0.00270	-0.0070	.66810	537.80000	.00010
1.052	23.640	-0.08120	-0.04450	-0.04660	-0.01430	-0.00690	-0.0230	.65520	537.80000	-0.00140
1.054	26.680	-0.06020	-0.01750	-0.05910	-0.01660	-0.00930	-0.0350	.64230	537.80000	-0.00210
1.050	29.210	-0.04440	-0.02030	-0.04820	-0.02270	-0.00000	-0.00040	.63390	537.80000	.00040
1.050	GRADIENT	-0.01200	.00033	.00007	-0.00011	-0.00008	.00001	.02850	.00000	-0.00001

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V RN/L = 3.0

(AEJ006) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1024 IN.  
 SCALE = .0300 SCALE

DNRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

BETA = .0000 ELEVON = 7.500  
 ALLRON = -7.500 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .0000 ELEV-R = 15.000

## PARAMETRIC DATA

RUN NO. 104/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFCD	CY	CYN	CBL	CYV	CYNV	KEP/L	Q	CBLV
1.203	-1.630	-0.0360	.00360	.00210	-.01860	-.00240	.00060	.79210	570.50000	.00010
1.202	.107	-0.01300	.00100	.00230	-.01870	-.00330	.00030	.72400	570.50000	-.00010
1.206	1.764	-0.03240	.00240	.00250	-.01850	-.00220	.00060	.71060	570.50000	.00010
1.205	3.072	-0.03650	.00260	.00270	-.01870	-.00190	.00050	.70680	570.50000	.00010
1.199	6.051	-0.07800	.00250	.00290	-.01860	-.00260	.00070	.70260	570.50000	.00010
1.198	8.271	-0.09380	.00230	.00300	-.01940	-.00230	.00050	.69670	570.50000	.00010
1.198	10.450	-0.10160	.00540	.00230	-.02200	-.00160	.00040	.68940	570.50000	.00020
1.193	13.790	-0.11530	.01160	.00090	-.02290	-.00170	.00030	.68280	570.50000	.00030
1.197	17.110	-0.12830	.00980	.00150	-.01960	-.00130	.00010	.67850	570.50000	.00040
1.196	20.390	-0.12800	.00830	.00270	-.01640	-.00230	.00060	.67250	570.50000	.00020
1.193	23.620	-0.11670	.01020	.00250	-.01450	-.00470	.00120	.66360	570.50000	-.00020
1.195	26.790	-0.08300	.00040	.00600	-.00930	-.00680	.00310	.65410	570.50000	-.00140
1.195	29.220	-0.06250	-.01650	.01130	-.00600	-.00870	.00400	.64860	570.50000	-.00240
	GRADIENT	-.01170	.00003	.00013	-.00001	.00018	-.00005	-.01512	-.00000	.00002

ARC 11-747 QAS3A P C M F W V HIGH RN/L

(AEJ087) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1064 IN.  
 SCALE = .00000 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRRON = .000 BDFLAP = 16.300  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 294 / 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.598	-1.554	-1.12010	.00320	.00000	-.00160	-.00030	-.00010	.84330	782.90000	.00020
.597	.072	-1.12070	.00320	.00020	-.00150	-.00110	.00020	.81820	782.90000	-.00010
.599	1.031	-1.12180	.00490	-.00010	-.00150	-.00010	-.00010	.78850	782.90000	.00010
.597	1.670	-1.12310	.00550	-.00020	-.00130	-.00020	-.00010	.77650	782.90000	.00020
.597	3.548	-1.12620	.00610	-.00020	-.00110	-.00090	-.00040	.74450	782.90000	.00030
.598	7.627	-1.13760	.00510	-.00050	-.00210	.00010	-.00020	.71220	782.90000	.00020
.597	9.539	-1.14610	.00460	-.00060	-.00110	-.00000	-.00010	.70330	782.90000	.00010
.598	12.630	-1.15070	.00460	-.00070	-.00270	-.00010	.00000	.69200	782.90000	.00010
.598	15.670	-1.14750	.00560	-.00120	-.00100	-.00030	.00030	.68330	782.90000	-.00010
.596	18.710	-1.13600	.00530	-.00120	-.00220	-.00100	.00030	.67650	782.90000	-.00010
.597	21.750	-1.13670	.00470	-.00040	-.00090	-.00060	.00010	.67040	782.90000	.00010
.596	24.710	-1.08740	.00480	-.00050	-.00090	-.00080	.00010	.65600	782.90000	.00010
.598	28.680	-1.04450	.01070	-.00310	-.00160	-.00040	-.00020	.63140	782.90000	.00040
GRADIENT		-.00152	.00045	-.00008	.00012	.00038	-.00010	-.00238	.00000	.00006

RUN NO. 293 / 0 RN/L = 5.52 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.800	-1.580	-1.11590	.00640	-.00060	-.00180	.00130	-.00060	.86470	840.90000	.00040
.800	.082	-1.11810	.00560	-.00050	-.00180	.00030	-.00030	.83370	840.90000	.00020
.799	1.104	-1.12250	.00710	-.00060	-.00180	.00070	-.00040	.79540	840.90000	.00030
.800	1.802	-1.12370	.00640	-.00080	-.00200	.00130	-.00060	.78280	840.90000	.00040
.798	3.564	-1.13220	.00650	-.00080	-.00160	.00120	-.00060	.74890	840.90000	.00040
.800	7.611	-1.15680	.00390	-.00030	-.00030	.00020	-.00020	.71640	840.90000	.00010
.800	9.576	-1.15130	.00340	-.00010	-.00110	-.00040	.00000	.70700	840.90000	.00000
.798	12.595	-1.14680	.00490	-.00160	-.00020	.00090	-.00040	.69430	840.90000	.00030
.798	15.660	-1.15680	.00270	-.00270	-.00110	.00120	-.00040	.68860	840.90000	.00030
.799	18.710	-1.15320	.00370	-.00370	-.00010	.00180	-.00070	.68080	840.90000	.00160
.799	21.760	-1.11670	.00640	-.00410	-.00250	.00050	-.00020	.66730	840.90000	.00140
.796	24.690	-.04060	.01270	-.00820	-.00170	.00620	-.00030	.64480	840.90000	.00240
.802	28.710	-.01470	.01240	-.00500	-.00090	.00380	-.00020	.63680	840.90000	.00160
GRADIENT		-.00394	.00011	-.00007	.00004	.00009	-.00003	-.00238	.00001	.00002



DATE 06 JUL 74

TABULATED SOURCE DATA - QASSA

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ARC 11-747 QASSA B C H F LA V HIGH RN/L

(AEJ007) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 16.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILERON = .000 BOFLAP = 16.300  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 292/0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLC	CY	CYN	CBL	CVY	CYNV	MCP/L	Q	CBLV
.900	-1.11460	.00620	-.00080	-.00150	-.00140	-.00070	-.00070	.88920	786.30000	.00050
.903	-1.11800	.00560	-.00070	-.00160	-.00140	-.00040	-.00040	.84870	786.30000	.00030
.899	-1.12640	.00670	-.00100	-.00120	-.00090	-.00060	-.00060	.80610	786.30000	.00040
.897	-1.1370	.00710	-.00110	-.00140	-.00100	-.00060	-.00060	.79130	786.30000	.00040
.901	-1.14730	.00690	-.00120	-.00110	-.00120	-.00060	-.00060	.75950	786.30000	.00040
.899	-1.17660	.00420	-.00110	-.00080	-.00080	-.00060	-.00060	.72950	786.30000	.00010
.899	-1.17410	.00290	-.00120	-.00160	-.00040	-.00020	-.00020	.71660	786.30000	.00010
.901	-1.17380	.00460	-.00210	-.00160	-.00080	-.00040	-.00040	.70470	786.30000	.00030
.899	-1.18370	.00670	-.00280	-.00090	-.00150	-.00070	-.00070	.69730	786.30000	.00050
.901	-1.17420	.00760	-.00380	-.00090	-.00320	-.00130	-.00130	.68720	786.30000	.00090
.903	-1.14370	.00430	-.00310	-.00110	-.00190	-.00100	-.00100	.67500	786.30000	.00100
.897	-1.16380	.01070	-.00550	-.00070	-.00530	-.00270	-.00270	.65140	786.30000	.00190
.902	-1.03820	.01370	-.00650	-.00080	-.00640	-.00300	-.00300	.64290	786.30000	.00240
GRADIENT	-.00792	.00027	-.00012	.00011	.00004	-.00004	-.00004	-.00039	.00000	-.00001

RUN NO. 291/0 RN/L = 4.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLC	CY	CYN	CBL	CVY	CYNV	MCP/L	Q	CBLV
1.051	-1.1020	.00440	-.00080	-.00140	-.00120	-.00020	-.00020	.92150	819.40000	.00030
1.054	-1.11940	.00360	-.00070	-.00130	-.00060	-.00010	-.00010	.86650	819.40000	.00010
1.052	-1.13390	.00510	-.00080	-.00130	-.00030	-.00030	-.00030	.82330	819.40000	.00020
1.052	-1.14130	.00530	-.00090	-.00130	-.00020	-.00010	-.00010	.80930	819.40000	.00020
1.052	-1.16840	.00620	-.00130	-.00120	-.00030	-.00030	-.00030	.77620	819.40000	.00030
1.051	-1.20950	.00560	-.00150	-.00060	-.00020	-.00020	-.00020	.74460	819.40000	.00030
1.048	-1.22180	.00730	-.00200	-.00190	-.00010	-.00010	-.00010	.73290	819.40000	.00030
1.050	-1.22500	.00760	-.00190	-.00190	-.00080	-.00010	-.00010	.71780	819.40000	.00010
1.051	-1.22470	.00620	-.00180	-.00210	-.00030	-.00020	-.00020	.70590	819.40000	.00000
1.050	-1.22510	.00960	-.00310	-.00130	-.00030	-.00030	-.00030	.69720	819.40000	.00040
1.051	-1.21400	.01230	-.00360	-.00050	-.00060	-.00060	-.00060	.68860	819.40000	.00050
1.049	-1.18690	.00680	-.00270	-.00020	-.00180	-.00070	-.00070	.67870	819.40000	-.00020
1.051	-1.1860	.00460	-.00040	-.00180	-.00020	-.00040	-.00040	.66080	819.40000	-.00030
GRADIENT	-.01399	.00049	-.00013	-.00004	-.00009	-.00005	-.00005	-.00005	.00000	-.00002

ARC 11-747 QAS3A B C H F W V HIGH RN/L

(NEJ007) (12 MAR 74)

## REFERENCE DATA

SEEP = 2.4210 SQ.FT. WSEP = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILRON = .0000 BOFLAP = 16.300  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 295/ 0 RN/L = 4.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBL V
1.197	-0.662	-1.10100	.00310	-.00030	-.00020	.00050	-.00030	.93690	823.00000	.00030
1.200	.041	-1.10320	.00350	-.00060	.00030	-.00050	.00000	.87520	823.00000	.00010
1.203	1.110	-1.12390	.00490	-.00070	.00030	.00040	-.00030	.82830	823.00000	.00030
1.204	1.613	-1.12980	.00500	-.00080	.00040	-.00020	-.00010	.81660	823.00000	.00010
1.204	3.531	-1.15320	.00510	-.00080	.00030	-.00040	.00000	.78190	823.00000	.00010
1.198	7.562	-1.19630	.00590	-.00120	.00050	-.00040	.00000	.74650	823.00000	.00010
1.201	9.591	-1.21140	.00560	-.00100	.00010	-.00020	.00000	.73650	823.00000	.00000
1.202	12.580	-1.22660	.00620	-.00120	.00030	-.00020	-.00010	.72250	823.00000	.00020
1.201	15.670	-1.23980	.00570	-.00100	.00010	-.00070	.00010	.71080	823.00000	.00000
1.201	18.740	-1.25390	.01070	-.00250	.00070	-.00050	.00000	.70150	823.00000	.00020
1.200	21.690	-1.26300	.00660	-.00110	.00010	-.00060	.00020	.69280	823.00000	.00010
1.200	24.700	-1.27050	.00970	-.00220	.00030	-.00070	.00010	.68340	823.00000	.00010
1.197	28.690	-1.16910	.00610	-.00080	.00040	-.00190	.00060	.67240	823.00000	-.00030
	GRADIENT	-.00253	.00051	-.00011	.00009	-.00014	.00005	-.00426	-.00000	-.00003

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## TABULATED SOURCE DATA - QM33A

ARC 11-747 QM33A B C M F W V NOM. RN/L

UAEJ05081 ( 12 MAR 74 )

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## REFERENCE DATA

REF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

WARP = 32.3010 IN.  
 WARP = .0000 IN.  
 WARP = 11.2500 IN.

BETA = .000  
 AIRLON = .000  
 SPOBER = 25.000  
 ELEV-L = 15.000  
 ELEV-R = 15.000

## PARAMETRIC DATA

RUN NO. 295 / 0 RN/L = 3.97 GRADIENT INTERVAL = -.500 / 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CNV	KCP/L	Q	CBLV
.598	-1.503	-11.220	.00280	.00200	-.00250	.00290	-.00240	.84570	476.30000	.00030
.598	.000	-12.550	.00220	.00000	-.00230	.00270	-.00240	.82150	476.30000	.00020
.597	1.100	-12.150	.00380	.00220	-.00200	.00140	-.00260	.78840	476.30000	.00030
.597	1.602	-12.320	.00330	-.00220	-.00740	.00090	-.00240	.77880	476.30000	.00030
.597	3.540	-12.660	.00340	-.00230	-.00210	.00160	-.00260	.74550	476.30000	.00030
.598	7.619	-13.870	.00440	-.00280	-.00250	.00140	-.00260	.71320	476.30000	.00040
.598	9.580	-14.650	.00360	-.00280	-.00190	.00250	-.00250	.70420	476.30000	.00020
.598	12.630	-15.230	.00220	-.00290	-.00200	.00260	-.00220	.69330	476.30000	.00020
.598	15.630	-14.650	.00460	-.00190	-.00110	.00220	-.00210	.68380	476.30000	.00020
.598	18.730	-15.240	.00690	-.00140	-.00260	-.00220	-.00240	.67930	476.30000	.00010
.598	21.730	-13.940	.00590	-.00110	-.00110	.00140	-.00230	.67090	476.30000	.00020
.598	24.720	-10.840	.00220	-.00280	.00390	.00140	-.00260	.65560	476.30000	.00010
.598	28.660	.00270	.00140	-.00430	.00240	-.00260	.00210	.63190	476.30000	.00010
GRADIENT		.00179	.00222	-.00208	.00243	.00019	-.00205	-.00239	.00000	.00001

RUN NO. 296 / 0 RN/L = 4.23 GRADIENT INTERVAL = -.500 / 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CNV	KCP/L	Q	CBLV
.799	-1.616	-11.470	.00190	.00160	-.00340	-.00380	.00370	.90360	640.70000	-.00260
.799	.087	-11.680	.00240	.00160	-.00350	-.00360	.00360	.86540	640.70000	-.00260
.799	1.078	-11.920	.00170	.00130	-.00350	-.00320	.00340	.82920	640.70000	-.00240
.799	1.600	-12.110	.00130	.00130	-.00340	-.00270	.00320	.80460	640.70000	-.00230
.799	3.557	-12.840	.00130	.00110	-.00330	-.00260	.00270	.76250	640.70000	-.00190
.799	7.536	-15.150	.00380	.00270	-.00200	-.00390	.00170	.72580	640.70000	-.00120
.799	9.581	-15.600	.00440	.00290	-.00170	-.00340	.00140	.71490	640.70000	-.00100
.801	12.600	-14.880	.00380	-.00280	.00190	-.00320	.00250	.69250	640.70000	-.00040
.801	15.600	-15.440	.00100	-.00210	.00280	.00170	-.00260	.68750	640.70000	.00100
.799	18.710	-16.700	.00740	-.00370	.00280	.00350	-.00140	.67370	640.70000	.00190
.800	21.730	-13.550	.00150	-.00330	.00240	.00560	-.00260	.65490	640.70000	.00270
.801	24.730	-.07580	.00120	-.00310	-.00190	.00490	-.00360	.63630	640.70000	.00170
.799	28.700	-.00120	.00420	-.00270	.00610	.00140	-.00180	-.00320	.00000	.00018
GRADIENT		.00326	.00149	-.00213	.00203	.00264	-.00225			

DATE 06 JUL 71

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F VI V NOM. RN/L

(AEJ008) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 FLEWON = 15.000  
 ATLRON = .000 BDFLAP = 16.300  
 SFDBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 297 / 0 RN/L = 3.76 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.89	-643	-11360	-01950	.00130	-00360	-00920	.00380	.93920	617.10000	-00760
.898	.662	-11700	-01900	.00110	-00370	-00890	.00360	.88490	617.10000	-00250
.902	1.096	-12310	-01820	.00110	-00340	-00810	.00340	.83370	617.10000	-00240
.901	1.590	-12590	-01680	.00090	-00340	-00860	.00350	.81680	617.10000	-00240
.901	3.540	-14070	-01340	.00240	-00310	-00630	.00260	.77330	617.10000	-00180
.900	7.604	-16980	-01050	.00070	-00310	-00540	.00220	.73640	617.10000	-00150
.901	9.561	-17520	-00800	-00020	-00340	-00540	.00140	.72500	617.10000	-00100
.899	12.600	-17160	-00230	-00160	-00170	-00320	.00050	.70950	617.10000	-00030
.901	15.670	-18100	.00380	-00240	.00090	.00160	-00070	.70140	617.10000	.00050
.904	18.720	-18240	.01160	-00410	.00090	.00330	-00160	.63250	617.10000	.00120
.901	21.740	-16120	.01550	-00240	.00090	.00470	-00240	.68080	617.10000	.00190
.901	24.740	-09740	.01290	-00140	.00320	-00060	-00100	.66110	617.10000	.00050
.900	28.670	-03650	.02670	-00030	.00370	.00070	-00020	.64270	617.10000	.00180
GRADIENT		-00651	.00149	-00021	.00014	.00063	-00027	-00833	.00000	.00019

RUN NO. 298 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.052	-671	-10800	-02010	.00110	-00190	-01020	.00430	.99460	628.50000	-00290
1.052	.059	-11520	-02030	.00080	-00210	-00080	.00420	.91260	628.50000	-00240
1.052	1.091	-12840	-01830	.00080	-00220	-00090	.00380	.85290	628.50000	-00250
1.052	1.612	-13490	-01830	.00070	-00220	-00090	.00380	.83510	628.50000	-00250
1.051	3.561	-15930	-01310	.00010	-00180	-00070	.00310	.79070	628.50000	-00210
1.049	7.594	-20200	-00720	-00080	-00130	-00470	.00190	.75270	628.50000	-00120
1.051	9.581	-21740	-00390	-00110	-00040	-00290	.00110	.74140	628.50000	-00070
1.049	12.610	-22410	-00420	.00080	.00030	-00150	.00050	.72440	628.50000	-00030
1.050	15.670	-22750	.00440	-00140	.00110	.00010	-00020	.71150	628.50000	.00020
1.049	18.720	-22780	.01190	-00260	.00180	.00140	-00090	.70170	628.50000	.00070
1.048	21.720	-22790	.01950	-00320	.00180	.00210	-00150	.69380	628.50000	.00120
1.054	24.730	-20000	.02500	-00090	.00110	.00130	-00130	.68250	628.50000	.00110
1.050	28.660	-13010	.00920	.00790	.00060	-00060	.00100	.66370	628.50000	-00060
GRADIENT		-01226	.00171	-00022	.00003	.00080	-00009	-00456	-00000	.00019





DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(AEJ008) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILRON = .0000 BDFLAF = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 299/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CVW	CYNV	XCP/L	Q	CBLV
1.198	-678	-09520	-02170	.00160	-00180	-001030	.00450	1.01100	573.20000	-00300
1.201	.061	-10250	-02090	.00130	-00170	-001010	.00440	.92990	573.20000	-00290
1.201	1.080	-11490	-01840	.00100	-00170	-000960	.00420	.86080	573.20000	-00270
1.203	1.594	-12140	-01750	.00080	-00160	-000890	.00390	.84210	573.20000	-00260
1.199	3.546	-14390	-01290	.00020	-00140	-000760	.00330	.79500	573.20000	-00210
1.198	7.574	-16610	-00650	-00070	-00110	-000460	.00200	.75720	573.20000	-00130
1.196	9.565	-20270	-00380	-00070	-00120	-000280	.00130	.74400	573.20000	-00080
1.200	12.600	-22120	.00100	-00110	-00010	-000160	.00060	.72870	573.20000	-00030
1.199	15.660	-23060	.00530	-00130	.00120	.00020	-00020	.71580	573.20000	.00020
1.198	18.700	-23270	.01130	-00130	.00160	.00060	-00090	.70600	573.20000	.00070
1.199	21.740	-22820	.01550	-00080	.00230	.00080	-00080	.69710	573.20000	.00070
1.198	24.680	-20890	.02020	-00010	.00280	-000190	-00010	.68700	573.20000	.00020
1.194	28.660	-17740	.02170	.00450	.00410	-000720	.00020	.67460	573.20000	-00010
	GRADIENT	-01166	.02214	-00033	.00009	.00067	-000029	-.004890	.000000	.000022

ARC 11-747 0453A B C M F W V LOW RN/L

(AEJ009) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRRON = .000 EDCLAP = 16.300  
 SPDRK = 25.000 BODDER = .000  
 ELEV-L = 15.000 LEV-R = 15.000

RUN NO. 304/0 RN/L = 1.79 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.586	-1.604	-1.1239	.00270	-.00340	-.00300	-.00180	.00060	.8630	208.10000	.00010
.602	.000	-1.1240	.00130	-.00050	-.00280	-.00190	.00060	.82050	208.10000	.00000
.598	1.095	-1.1230	.00090	-.00060	-.00280	-.00090	.00020	.76670	208.10000	.00020
.596	1.602	-1.1240	.00300	-.00080	-.00280	-.00110	.00040	.77540	208.10000	.00010
.600	3.550	-1.1260	.00410	-.00100	-.00280	-.00090	.00020	.74400	208.10000	.00020
.602	7.585	-1.1180	.00270	-.00200	-.00290	-.00180	.00050	.71450	208.10000	.00000
.598	9.579	-1.14380	.00330	-.00210	-.00230	-.00190	.00050	.70310	208.10000	-.00010
.597	12.610	-1.14620	.00010	-.00050	.00470	-.00280	.00090	.69200	208.10000	-.00030
.599	15.670	-1.14400	.00670	-.00230	.00260	-.00180	.00050	.68390	208.10000	-.00010
.597	18.700	-1.15970	.00380	-.00280	.00020	-.00380	.00120	.66890	208.10000	-.00030
.602	21.700	-1.14150	.00160	-.00230	.00520	-.00320	.00110	.67210	208.10000	-.00040
.596	24.660	-.09230	-.00010	-.00290	.00130	-.00200	.00050	.65740	208.10000	-.00010
.603	28.510	-.09750	.00540	-.00480	.00120	-.00160	.00020	.63490	208.10000	.00010
GRADIENT		-.00102	.00050	-.00015	.00011	.00025	-.00010	-.002435	.00000	.00003

RUN NO. 303/0 RN/L = 2.10 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.798	-.610	-1.11810	.00310	-.00250	-.00280	-.00020	-.00010	.86690	310.70000	.00030
.798	.074	-1.12020	.00440	-.00070	-.00280	-.00010	-.00010	.83240	310.70000	.00010
.796	1.089	-1.12380	.00530	-.00100	-.00260	.00040	-.00030	.79700	310.70000	.00030
.797	1.592	-1.12550	.00480	-.00100	-.00260	.00020	-.00020	.78150	310.70000	.00040
.802	3.545	-1.13560	.00530	-.00110	-.00230	.00060	.00010	.75080	310.70000	.00020
.798	7.589	-1.15540	.00230	-.00110	.00080	-.00130	.00040	.71970	310.70000	.00000
.799	9.575	-1.15210	.00140	-.00120	.00270	-.00150	.00050	.70890	310.70000	-.00010
.805	12.600	-1.15310	.00220	-.00200	-.00010	-.00070	.00020	.69670	310.70000	.00010
.801	15.650	-1.16570	.00390	-.00270	.00470	-.00060	.00010	.69170	310.70000	.00020
.801	18.690	-1.15800	.00100	-.00270	.00120	-.00030	.00000	.68270	310.70000	.00020
.800	21.670	-1.12700	.00420	-.00210	-.00120	-.00020	-.00010	.67040	310.70000	.00030
.800	24.670	-.04590	.00210	-.00400	.00120	.00470	-.00170	.64650	310.70000	.00170
.800	28.610	-.01630	.00910	-.00690	.00210	.00060	-.00080	.63730	310.70000	.00110
GRADIENT		-.00422	.00045	-.00014	.00013	-.00011	.00004	-.002729	.00000	-.00002

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V LOW RN/L

(AEJ009) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 RREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0317 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILERON = .0000 BOFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .0000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 302/0 RN/L = 2.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CT	CYN	CBL	CTV	CYV	XCP/L	Q	CBLV
.904	-626	-11820	.02610	-.00110	-.00210	.00000	-.00030	.88700	358.50000	.00050
.903	.046	-12130	.02440	-.00120	-.00200	.00010	-.00030	.88040	358.50000	.00030
.901	1.071	-12980	.02560	-.00160	-.00200	-.00080	-.00000	.88780	358.50000	.00030
.901	1.590	-13360	.02530	-.00180	-.00200	-.00040	-.00010	.79340	358.50000	.00030
.896	3.527	-15050	.02620	-.00160	-.00180	.00030	-.00030	.75910	358.50000	.00040
.894	7.579	-17070	.02510	-.00100	-.00170	.00030	-.00070	.72840	358.50000	-.00020
.897	9.555	-16760	.02230	-.00150	-.00160	.00050	-.00050	.71610	358.50000	-.00010
.898	12.570	-17740	.02210	-.00180	-.00160	.00060	-.00010	.70640	358.50000	.00010
.901	15.660	-18370	.02390	-.00290	-.00220	.00000	-.00010	.69790	358.50000	.00020
.900	18.680	-17770	.02690	-.00380	-.00260	.00150	-.00070	.68860	358.50000	.00070
.901	21.680	-15000	.02510	-.00280	-.00200	.00190	-.00090	.67650	358.50000	.00060
.901	24.660	-10790	.02560	-.01250	-.00300	.00310	-.00470	.65330	358.50000	.00330
.901	28.610	-04120	.02790	-.02690	-.00270	.00610	-.00330	.64370	358.50000	.00240
	GRADIENT	-.00827	.00017	-.00013	.00011	.00005	.00001	-.03015	-.00000	-.00001

RUN NO. 301/0 RN/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CT	CYN	CBL	CTV	CYV	XCP/L	Q	CBLV
1.057	-644	-11520	.02390	-.00070	-.00060	-.00090	.00010	.91670	412.00000	.00010
1.056	.033	-12250	.02260	-.00080	-.00050	-.00170	.00050	.87210	412.00000	.00000
1.057	1.070	-13760	.02420	-.00120	-.00010	-.00120	.00020	.82300	412.00000	.00010
1.052	1.571	-14340	.02430	-.00120	.00000	-.00100	.00000	.80970	412.00000	.00010
1.048	3.514	-17130	.02440	-.00150	-.00010	-.00050	-.00010	.77760	412.00000	.00020
1.046	7.559	-21140	.02670	-.00190	-.00010	-.00060	.00000	.74500	412.00000	.00020
1.049	9.537	-22150	.02530	-.00190	-.00110	-.00130	.00020	.73380	412.00000	.00010
1.052	12.560	-22620	.02260	-.00070	-.00150	-.00200	.00050	.71910	412.00000	.00000
1.049	15.620	-22870	.02520	-.00170	-.00100	-.00270	.00080	.70770	412.00000	-.00020
1.042	18.660	-23010	.01130	-.00400	-.00030	-.00150	.00020	.69870	412.00000	.00020
1.052	21.680	-22400	.01520	-.00550	-.00080	.00030	-.00060	.69090	412.00000	.00060
1.050	24.650	-19440	.02330	-.00170	-.00350	.00130	-.00130	.68000	412.00000	-.00060
1.050	28.610	-12650	.02660	-.00240	-.00070	-.00190	.00040	.66240	412.00000	.00000
	GRADIENT	-.01361	.00027	-.00020	.00013	.00017	-.00008	-.03250	-.00000	.00003

ARC 11-747 QASSA B C M F W V LOW RN/L

(AEJ003) ( 2 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAB = 16.300  
 SDEPR = 25.000 SUTTER = .000  
 ELEV-L = 15.000 ELEV-H = 15.000

RUN NO. 3007 0 RN/L = 2.34 GRADIENT INTERVAL = -5.007 5.000

MACH	ALPHA	CLMP/D	CY	CYN	CB/L	CYV	CYV	XCF/L	Q	CPLV
1.192	-1.659	-1.0310	.00250	-.00030	-.00070	-.00150	.00130	.93700	442.50000	.00010
1.193	.050	-1.1230	.00140	-.00030	-.00060	-.00190	.00150	.88060	442.50000	-.00010
1.197	1.064	-1.2650	.00350	-.00080	-.00030	-.00140	.00030	.83260	442.50000	.00010
1.197	1.565	-1.1320	.00130	-.00070	-.00030	-.00170	.00140	.82010	442.50000	.00000
1.199	3.528	-1.1570	.00430	-.00100	-.00020	-.00130	.00070	.78430	442.50000	.00010
1.192	7.557	-1.1920	.00490	-.00110	-.00060	-.00150	.00140	.74930	442.50000	.00010
1.191	9.546	-1.2130	.00390	-.00110	-.00080	-.00190	.00050	.73760	442.50000	.00000
1.193	12.570	-1.2270	.00440	-.00150	-.00080	-.00240	.00070	.72300	442.50000	-.00010
1.191	15.630	-1.2330	.00480	-.00170	-.00080	-.00160	.00150	.71180	442.50000	.00010
1.189	18.640	-1.2350	.00660	-.00210	-.00070	-.00070	.00070	.70290	442.50000	-.00010
1.195	21.680	-1.2320	.00800	-.00230	-.00070	-.00320	.00100	.69360	442.50000	-.00020
1.194	24.650	-1.2440	.01000	-.00300	-.00030	-.00280	.00080	.68440	442.50000	-.00020
1.188	28.600	-1.1770	.00690	-.00250	-.00140	-.00280	.00090	.67410	442.50000	-.00030
	GRADIENT	-1.01291	.00057	-.00018	.00012	.00006	-.00002	-.03473	-.00000	.00002



TABULATED SOURCE DATA - QAS3A

DATE 06 JUL 74

(AEJ010) ( 12 MAR 74 )

ARC 11-747 QAS3A B C M F W V NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRRON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 309/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.598	-1.648	.00430	.00260	-.00030	-.00200	.00030	-.00020	.67720	480.80000	.00030
.599	-.078	.00550	.00230	-.00030	-.00210	-.00100	.00020	.66140	480.80000	.00010
.599	1.123	.00500	.00380	-.00050	-.00210	.00020	-.00010	.59020	480.80000	.00030
.598	1.600	.00510	.00270	-.00050	-.00230	-.00040	.00000	.60340	480.80000	.00020
.596	3.563	.00420	.00270	-.00060	-.00270	-.00030	.00000	.62320	480.80000	.00020
.597	7.534	-.00080	.00280	-.00110	-.00310	-.00110	.00020	.63350	480.80000	.00010
.599	9.576	-.00390	.00310	-.00110	-.00360	-.00040	.00000	.63580	480.80000	.00030
.598	12.580	-.00890	.00450	-.00060	-.00150	-.00180	.00050	.63780	480.80000	.00000
.598	15.660	-.01490	.00540	-.00220	-.00240	-.00060	.00010	.63920	480.80000	.00020
.598	18.700	-.02240	.00520	-.00210	-.00100	-.00090	.00020	.64130	480.80000	.00010
.597	21.710	-.02400	.00530	-.00180	-.00130	-.00040	.00000	.64060	480.80000	.00020
.597	24.680	-.00540	.00340	-.00060	-.00100	-.00120	.00030	.63430	480.80000	.00010
.597	28.620	.00980	.00660	-.00190	-.00080	-.00170	.00050	.61110	480.80000	-.00010
	GRADIENT	-.00222	.00006	-.00008	-.00017	-.00024	.00001	-.03448	.00000	-.00001

RUN NO. 308/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.799	-.664	.01040	.00280	-.00050	-.00210	.00010	-.00010	.70910	639.20000	.00030
.799	.069	.00950	.00170	-.00030	-.00220	-.00070	.00020	.69960	639.20000	.00010
.800	1.091	.00820	.00330	-.00060	-.00230	.00050	-.00030	.55880	639.20000	.00040
.800	1.598	.00800	.00210	-.00090	-.00240	.00010	-.00010	.58870	639.20000	.00030
.802	3.534	.00610	.00380	-.00110	-.00280	.00050	-.00030	.61950	639.20000	.00040
.798	7.575	-.00660	.00230	-.00130	-.00320	.00040	-.00030	.63890	639.20000	.00040
.799	9.568	-.01070	.00220	-.00110	-.00120	.00010	-.00010	.64070	639.20000	.00020
.799	12.590	-.01250	.00180	-.00220	-.00260	.00080	-.00040	.64000	639.20000	.00040
.797	15.650	-.02280	.00200	-.00260	-.00090	.00010	-.00040	.64340	639.20000	.00050
.798	18.710	-.02800	-.00150	-.00300	-.00000	.00050	-.00050	.64370	639.20000	.00060
.796	21.700	-.01740	-.00330	-.00360	-.00020	.00010	-.00030	.63860	639.20000	.00090
.800	24.680	.02900	.01090	-.00690	-.00510	.00600	-.00020	.62330	639.20000	.00190
.796	28.600	.00490	.01150	-.00570	-.00120	.00340	-.00190	.61250	639.20000	.00170
	GRADIENT	-.00101	.00031	-.00016	-.00017	.00017	-.00008	-.04531	-.00000	-.00004

ARC 11-747 Q453A B C M F W Y NMH. RN/L

(SEJ010) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 26.1004 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000  
 ALTRON = .000  
 SPOBCK = 25.000  
 ELEV-L = 0  
 ELEV-H = .000

RUN NO. 357/ 0 RN/L = 3.70 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	YCP/L	2	CBLV
.895	-1.567	.01120	.00210	-.00070	-.00170	-.00270	-.00000	.73460	607.00000	.00020
.894	.169	.01140	.00210	-.00070	-.00180	-.00020	-.00000	1.14200	607.00000	.00020
.893	1.025	.00830	.00310	-.00110	-.00180	.00020	-.00000	.57540	607.00000	.00040
.894	1.593	.00550	.00230	-.00100	-.00180	.00020	-.00000	.58740	607.00000	.00030
.893	3.540	.00320	.00320	-.00140	-.00270	.00060	-.00000	.62640	607.00000	.00040
.891	7.508	-.01140	.00190	-.00120	-.00270	.00060	-.00000	.64330	607.00000	.00040
.892	9.571	-.01340	.00050	-.00160	-.00050	.00030	-.00000	.64290	607.00000	.00030
.895	12.590	-.02300	.00110	-.00170	-.00160	.00090	-.00000	.64610	607.00000	.00040
.892	15.650	-.03740	.00030	-.00260	-.00080	.00090	-.00000	.65010	607.00000	.00050
.893	16.680	-.04300	.00080	-.00260	-.00010	.00140	-.00000	.64930	607.00000	.00050
.893	21.690	-.03660	.00070	-.00330	.00030	.00340	-.00000	.64510	607.00000	.00100
.893	24.670	.01300	.00570	-.00280	-.00240	.00570	-.00000	.62660	607.00000	.00200
.888	28.550	.04370	.00390	-.00370	-.00020	.00380	-.00000	.63200	607.00000	.00110
GRADIENT		-.00247	.00033	-.00017	-.00023	.00031	-.00000	-.07174	.00000	.00000

RUN NO. 356/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	YCP/L	2	CBLV
1.054	-1.553	.01190	.00190	-.00050	-.00240	.00040	-.00000	.64240	630.40000	.00040
1.054	.058	.00390	.00130	-.00050	-.00270	-.00040	-.00000	.62710	630.40000	.00020
1.054	1.066	-.00470	.00200	-.00060	-.00250	.00030	-.00000	.61560	630.40000	.00030
1.053	1.579	-.01140	.00110	-.00060	-.00240	.00070	-.00000	.66650	630.40000	.00040
1.052	3.541	-.03490	.00230	-.00080	-.00240	.00020	-.00000	.66490	630.40000	.00040
1.053	7.557	-.06940	.00340	-.00120	-.00160	.00020	-.00000	.66540	630.40000	.00020
1.048	9.546	-.07320	.00170	-.00070	-.00270	.00050	-.00000	.67980	630.40000	.00040
1.051	12.600	-.04250	.00240	-.00080	-.00010	.00020	-.00000	.67130	630.40000	.00020
1.051	15.620	-.09530	.00130	-.00080	.00100	-.00100	-.00000	.67120	630.40000	.00010
1.052	18.670	-.10960	.00760	-.00250	.00050	.00040	-.00000	.65940	630.40000	.00030
1.050	21.670	-.11070	.00320	-.00040	.00150	.00010	-.00000	.66530	630.40000	.00040
1.048	24.660	-.09460	.00190	-.00010	.00040	-.00040	-.00000	.65630	630.40000	-.00040
1.048	28.620	-.15580	.00340	-.00030	.00090	-.00280	-.00000	.64760	630.40000	-.00030
GRADIENT		-.01292	.00012	-.00007	.00003	.00005	-.00000	-.07545	.00000	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0A33A

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ARC 11-747 0A33A B C H F M V NOM. RN/L

(AEJ010) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XNCF = 32.3010 IN.  
 LREF = 14.2440 IN. YNCF = .0000 IN.  
 BREF = 28.1004 IN. ZNCF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = 16.300  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 303 / 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMFLO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.199	-0.664	.00020	.00220	-.00030	-.00220	-.00040	.00000	.76650	567.90000	.00020
1.201	.059	-.00140	.00260	-.00030	-.00220	-.00090	.00020	.65690	567.90000	.00010
1.199	1.079	-.01440	.00230	-.00020	-.00230	-.00040	.00000	.69410	567.90000	.00020
1.196	1.568	-.02000	.00120	-.00020	-.00220	-.00050	.00000	.69640	567.90000	.00020
1.200	3.324	-.04400	.00230	-.00040	-.00180	.00020	-.00020	.70180	567.90000	.00030
1.198	7.572	-.07840	.00330	-.00060	-.00050	.00040	.00000	.69440	567.90000	.00020
1.197	9.546	-.08650	.00430	-.00100	-.00170	-.00060	.00010	.68830	567.90000	.00020
1.197	12.570	-.09750	-.00110	.00110	.00110	-.00110	.00030	.68120	567.90000	.00010
1.198	15.610	-.11190	.00360	-.00070	.00030	-.00130	.00040	.67820	567.90000	.00000
1.192	18.650	-.12170	.00640	-.00070	.00090	-.00080	.00010	.67480	567.90000	.00020
1.200	21.670	-.11910	.00520	-.00090	.00130	-.00180	.00060	.66950	567.90000	-.00010
1.187	24.660	-.10760	.00810	-.00190	.00110	-.00160	.00060	.66300	567.90000	-.00010
1.195	28.600	-.10560	.00960	-.00200	.00070	-.00030	.00000	.65920	567.90000	.00040
	GRADIENT	-.01242	-.00006	-.00002	.00009	.00019	-.00007	-.00679	.00000	.00003

ARC 11-747 0453A B C M F M V NOM. RN/L

(AEJUS11) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 26.1004 IN.  
 SCALE = .0300 SCALE

MREF = 32.3010 IN.  
 YREF = .0020 IN.  
 ZREF = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEVOM = .0000  
 AILLOM = .0000 BDFLAP = -11.7000  
 SPDBEV = 25.0000 FODDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 139/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FID	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.598	-1.654	.05380	.00340	-.00010	-.00180	.00020	-.00010	.81370	475.70000	.00020
.598	-1.145	.05380	.00270	-.00010	-.00180	-.00020	.00000	.91110	475.70000	.00010
.598	1.200	.05340	.00390	-.00020	-.00200	.00070	-.00040	1.47200	475.70000	.00030
.600	1.703	.05330	.00390	-.00020	-.00200	.00090	-.00040	-9.54900	475.70000	.00030
.600	3.653	.05350	.00410	-.00020	-.00220	.00020	-.00020	.43160	475.70000	.00020
.600	5.631	.05330	.00390	-.00060	-.00240	.00050	-.00030	.53360	475.70000	.00020
.598	7.735	.05010	.00420	-.00090	-.00280	.00050	-.00030	.57190	475.70000	.00020
.598	9.708	.04620	.00420	-.00070	-.00340	.00040	-.00020	.59150	475.70000	.00020
.598	12.770	.04070	.00420	-.00010	-.00190	-.00010	-.00010	.60720	475.70000	.00020
.599	15.830	.03630	.00520	-.00070	-.00210	-.00070	-.00010	.61460	475.70000	.00030
.599	18.890	.02720	.00740	-.00190	-.00200	-.00010	-.00010	.62170	475.70000	.00020
.598	21.890	.02950	.00750	-.00100	-.00230	-.00030	-.00030	.62250	475.70000	.00030
.598	24.930	.06040	.00120	-.00030	-.00070	-.00080	.00020	.61340	475.70000	.00030
.598	28.990	.13950	.00710	-.00030	-.00260	.00020	-.00070	.66510	475.70000	.00040
.598	GRADIENT	-.00001	.00025	-.00009	-.00010	.00010	-.00005	-.56607	.00000	.00001

RUN NO. 138/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FID	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.797	-1.666	.06350	.00380	-.00240	-.00190	.00030	-.00030	.83190	637.70000	.00030
.805	.225	.06340	.00230	-.00240	-.00210	.00070	-.00040	.94110	637.70000	.00030
.799	1.245	.06230	.00370	-.00260	-.00220	.00070	-.00040	1.56600	637.70000	.00030
.802	1.767	.06240	.00300	-.00270	-.00240	.00070	-.00040	-4.11530	637.70000	.00040
.801	3.718	.06190	.00370	-.00080	-.00260	.00040	-.00030	.42630	637.70000	.00030
.800	5.721	.05720	.00240	-.00070	-.00300	.00080	-.00020	.53620	637.70000	.00030
.800	7.779	.05030	.00250	-.00090	-.00330	.00030	-.00050	.57700	637.70000	.0004
.799	9.776	.04800	.00100	-.00030	-.00290	.00030	-.00020	.57150	637.70000	.00030
.803	12.810	.04770	.00220	-.00030	-.00210	.00080	-.00040	.61170	637.70000	.00040
.803	15.870	.03800	.00180	-.00250	-.00280	.00090	-.00040	.61320	637.70000	.00040
.800	18.930	.03700	-.00090	-.00310	-.00340	.00210	-.00060	.61730	637.70000	.0007
.796	21.990	.06090	-.00220	-.00400	-.00350	.00350	-.00040	.61120	637.70000	.0010
.797	25.120	.12250	.01000	-.00680	-.00340	.00580	-.00020	.56840	637.70000	.00200
.800	29.150	.14400	.01450	-.00600	-.00110	.00480	-.00040	.55420	637.70000	.00140
.800	GRADIENT	-.00000	.00008	-.00010	-.00016	.00000	-.00000	-.00001	.00000	.00000



DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NOM. RN/L

(AEJ011) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

WREF = 32.3010 IN.  
 YREF = .0000 IN.  
 ZREF = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000  
 AILRON = .000  
 SPDRK = 25.000  
 ELEV-L = .000  
 ELEV-R = .000  
 ELEV-N = .000  
 BDFLAP = -11.700  
 RUDDER = .000

RUN NO. 137/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF40	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.905	-.662	.06850	.00410	-.00100	-.00200	.00030	-.00030	.86450	618.60000	.00040
.901	-.205	.06320	.00310	-.00070	-.00210	-.00010	-.00010	1.01900	618.60000	.00020
.903	1.242	.05970	.00330	-.00100	-.00210	.00060	-.00050	-9.67500	618.60000	.00040
.901	1.754	.05870	.00320	-.00110	-.00230	.00060	-.00040	-.06140	618.60000	.00040
.903	3.702	.05300	.00350	-.00100	-.00190	.00060	-.00040	.49410	618.60000	.00030
.903	5.695	.05070	.00390	-.00120	-.00290	.00020	-.00020	.55470	618.60000	.00030
.900	7.745	.04230	.00180	-.00110	-.00190	.00050	-.00050	.58840	618.60000	.00030
.898	9.720	.04110	.00260	-.00150	-.00050	.00040	-.00020	.59830	618.60000	.00030
.902	12.750	.02810	.00260	-.00140	-.00140	.00140	-.00060	.61320	618.60000	.00040
.900	15.800	.01790	.00290	-.00220	-.00120	.00230	-.00010	.62390	618.60000	.00050
.900	18.880	.02500	.00220	-.00260	-.00120	.00230	-.00010	.62240	618.60000	.00080
.898	21.990	.03240	-.00280	-.00200	-.00080	.00180	-.00100	.61350	618.60000	.00080
.897	25.090	.11830	.01090	-.00590	-.00380	.00940	-.00420	.59060	618.60000	.00030
.898	29.090	.13090	.01540	-.00430	-.00260	.00290	-.00170	.59120	618.60000	.00130
	GRADIENT	-.00359	-.00008	-.00003	.00002	.00012	-.00005	-.13382	.00000	-.00000

RUN NO. 136/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF40	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.052	-.650	.05820	.00310	-.00060	-.00230	.00070	-.00040	.92600	628.00000	.00040
1.051	.178	.04990	.00290	-.00050	-.00250	.00020	-.00030	1.46200	628.00000	.00020
1.052	1.177	.03840	.00270	-.00060	-.00240	.00040	-.00030	.32860	628.00000	.00030
1.050	1.667	.03280	.00190	-.00060	-.00200	.00050	-.00040	.47690	628.00000	.00030
1.051	3.585	.01230	.00280	-.00090	-.00220	.00020	-.00030	.61060	628.00000	.00040
1.050	5.549	.00590	.00320	-.00120	-.00220	.00050	-.00040	.63940	628.00000	.00040
1.049	7.601	-.01730	.00340	-.00150	-.00190	.00080	-.00050	.64720	628.00000	.00040
1.052	9.577	-.02410	.00160	-.00070	-.00130	.00130	-.00060	.64910	628.00000	.00050
1.051	12.610	-.03160	.00230	-.00070	-.00080	.00050	-.00030	.64930	628.00000	.00040
1.048	15.690	-.04220	.00520	-.00130	-.00080	.00000	-.00020	.65030	628.00000	.00030
1.051	18.720	-.05560	.00910	-.00300	.00040	.00020	-.00020	.65210	628.00000	.00040
1.051	21.740	-.05990	.01250	-.00380	.00030	.00020	-.00020	.65090	628.00000	.00040
1.049	24.820	-.02280	.00060	-.00040	.00030	.00100	-.00020	.63920	628.00000	-.00040
1.048	28.930	.03960	.00760	-.00140	.00060	-.00110	-.00010	.62200	628.00000	.00040
	GRADIENT	-.01092	-.00002	-.00008	.00006	-.00008	.00001	-.11490	.00000	.00002

ARC 11-747 QAS3A B C M F W V NMH, RN/L

(AEJELL) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. TMRF = .0000 IN.  
 SREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .00300 SCALE

## PARAMETRIC DATA

BETA = .001 ELEVATION = .000  
 ALLRDM = .001  
 SPOCK = 25.000 EODDER = .000  
 ELEV-L = .000 ELEV-H = .000

RUN NO. 135/ 0 RN/L = 2.97 GRADIENT INTERVAL = 10.00/ 5.00

MACH	ALPHA	CLMPD	CT	CYN	CBL	CYV	CPHY	ACP/L	Q	CBV
1.202	-1.760	.0459	.00130	-.00020	-.00210	.00070	-.00020	.91540	.567.00070	.00120
1.202	.124	.0365	.00110	.00000	-.00210	-.00070	.00010	1.51670	.567.00070	.00130
1.203	1.122	.02350	.00150	-.00030	-.00210	.00030	-.00070	.44610	.567.00070	.00120
1.202	1.627	.01770	.00120	-.00030	-.00190	-.00010	-.00010	.55270	.567.00070	.00120
1.203	3.540	-.00330	.00200	-.00030	-.00180	.00000	-.00020	.63880	.567.00070	.00130
1.204	5.511	-.02165	.00340	-.00070	-.00110	.00020	-.00020	.65740	.567.00070	.00120
1.198	7.563	-.03310	.00260	-.00070	-.00110	.00030	-.00030	.66330	.567.00070	.00120
1.199	9.537	-.04160	.00300	-.00090	-.00160	.00020	-.00030	.66150	.567.00070	.00130
1.202	12.560	-.05120	.00010	.00040	.00050	-.00070	.00010	.65970	.567.00070	.00110
1.200	15.510	-.06490	.00530	-.00110	.00090	-.00090	.00020	.66030	.567.00070	.00110
1.201	18.650	-.07520	.00610	-.00160	.00050	-.00060	.00010	.65970	.567.00070	.00120
1.200	21.690	-.08470	.00820	-.00200	.00050	-.00100	.00020	.65470	.567.00110	.00130
1.199	24.720	-.09580	.00400	-.00030	.00220	-.00320	.00150	.64960	.567.00000	-.00070
1.199	28.750	-.09340	.00570	-.00030	.00110	-.00150	.00110	.64140	.567.00000	-.00070
1.198		-.09175	.00020	-.00005	.00000	.00000	.00000	.6386	.567.00000	.00104

GRADIENT

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V MON. RNVL

(AEJ012) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. UNRF = 32.3010 IN.  
 LREF = 14.2440 IN. UNRF = .0000 IN.  
 BREF = 20.1004 IN. UNRF = 11.2300 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOBK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 154/ 0 RNVL = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CTV	CNV	KCF/L	Q	CBLV
.600	-4.934	.05170	.09270	-.00710	.00310	.04090	-.01750	.93870	478.10000	.01230
.602	-2.947	.05320	.05360	-.00360	.00240	.02250	-.00970	.92780	478.10000	.00690
.602	-.963	.05420	.01890	-.00100	-.00110	.00720	-.00320	.91260	478.10000	.00230
.599	.027	.05410	.00200	.00200	-.00190	-.00250	.00200	.89870	478.10000	.00010
.599	1.056	.05400	-.01590	.00110	-.00240	-.00770	.00310	.89910	478.10000	-.00210
.599	3.107	.05230	-.04890	.00290	-.00320	-.02160	.00910	.88840	478.10000	-.02640
.600	5.164	.04950	-.08390	.00660	-.00520	-.03960	.01700	.88770	478.10000	-.01170
.601	6.894	.04680	-.12020	.00890	-.00640	-.05390	.02300	.88450	478.10000	-.01570
	GRADIENT	.00012	-.01762	.00124	-.00078	-.00775	.00329	-.00840	-.00000	-.00231

RUN NO. 149/ 0 RNVL = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CTV	CNV	KCF/L	Q	CBLV
.799	-4.953	.06140	.10250	-.00900	.00340	.04430	-.01910	.97150	640.20000	.01340
.801	-2.958	.06220	.05870	-.00520	.00260	.02470	-.01070	.96420	640.20000	.00760
.803	-.971	.06330	.02210	-.00180	-.00130	.00890	-.00390	.94780	640.20000	.00280
.802	.026	.06350	.00230	-.00040	-.00210	-.00250	.00220	.93840	640.20000	.00010
.803	1.060	.06350	-.01700	.00120	-.00240	-.00840	.00340	.93620	640.20000	-.00220
.800	3.118	.06250	-.05340	.00380	-.00410	-.02320	.00980	.92880	640.20000	-.02690
.799	5.183	.05930	-.09390	.00810	-.00600	-.04250	.01820	.92080	640.20000	-.01250
.798	7.077	.05640	-.12830	.01090	-.00730	-.05890	.02510	.90760	640.20000	-.01700
	GRADIENT	.00029	-.01905	.00167	-.00092	-.00837	.00358	-.00574	.00000	-.00251

RUN NO. 148/ 0 RNVL = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CTV	CNV	KCF/L	Q	CBLV
.900	-4.948	.06090	.11010	-.01330	.00230	.04790	-.02060	1.05600	612.40000	.01430
.905	-2.964	.06140	.06690	-.00790	.00270	.02790	-.01210	1.06100	612.40000	.00860
.904	-.970	.06390	.02360	-.00270	-.00160	.00460	-.00380	1.03900	612.40000	.00280
.902	.029	.06590	.00220	-.00070	-.00200	-.00200	.00200	1.02100	612.40000	.00030
.901	1.056	.06530	-.01620	.00080	-.00260	-.00420	.00330	1.01200	612.40000	-.00220
.899	3.120	.06370	-.05730	.00530	-.00360	-.02620	.01100	.99950	612.40000	-.00760
.903	5.183	.05960	-.10480	.01140	-.00480	-.04630	.01980	.98630	612.40000	-.01350
.901	7.190	.05900	-.14040	.01420	-.00560	-.06230	.02660	.96960	612.40000	-.01780
	GRADIENT	.00051	-.02079	.00229	-.00072	-.00916	.00331	-.00814	.00000	-.00271

DATE 06 JUL 74

TABULATED SOURCE DATA - QMS3A

PAGE 16A

ARC 11-747 QMS3A B C H F W V NDM. RN/L

(05J012) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SJ.FT.  
 LREF = 14.2440 IN.  
 BREF = 20.1104 IN.  
 SCALE = .00300 SCALE

## PARAMETRIC DATA

ALPHA = 1.00000  
 ALLUEN = 11.700  
 SREFK = 25.000  
 ELEVLE = 1000.0

RUN NO. 145/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCFL	Q	BLV
1.051	-4.949	.04730	.03460	-.00980	.00690	.04390	-.02300	1.07600	624.30000	.01400
1.051	-2.059	.04430	.05710	-.00480	.00370	.02530	-.01130	1.77100	624.30000	.00410
1.056	-.074	.04750	.01980	-.00200	.00010	.00310	-.00040	1.91500	624.30000	.00300
1.055	.020	.05160	.06070	-.00050	-.00220	.00020	-.00030	1.51000	624.30000	.00030
1.074	1.062	.05710	-.01680	.00110	-.00430	-.00680	.00150	1.45700	624.30000	-.00240
1.052	3.120	.04890	-.05520	.00370	-.00770	-.02570	.01110	1.40100	624.30000	-.00760
1.047	5.177	.04650	-.09420	.00770	-.01170	-.04390	.01940	1.18400	624.30000	-.01330
1.051	7.056	.04660	-.13170	.01120	-.01540	-.06350	.02720	1.30900	624.30000	-.01840
	GRADIENT	.00025	-.01904	.00164	-.00203	-.00661	.00311	-.07332	.00000	-.00267

RUN NO. 146/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCFL	Q	BLV
1.203	-4.944	.03440	.03310	-.00760	.00670	.04000	-.01360	1.26800	571.60000	.01350
1.204	-2.956	.03530	.05600	-.00410	.00280	.02410	-.01110	3.12700	571.60000	.00410
1.204	-.964	.03620	.01850	-.00140	-.00020	.00090	-.00040	1.36900	571.60000	.00040
1.200	.023	.03660	.00120	-.00020	-.00200	-.00260	.00020	1.81200	571.60000	.00010
1.200	1.060	.03680	-.01820	.00110	-.00600	-.00630	.00260	1.65200	571.60000	-.00170
1.200	3.115	.03590	-.03760	.00390	-.00600	-.02530	.01110	1.64200	571.60000	-.00750
1.203	5.179	.03630	-.09360	.00700	-.00910	-.04270	.01910	1.46900	571.60000	-.01310
1.200	6.907	.03710	-.12410	.00920	-.01190	-.05740	.02590	1.34300	571.60000	-.01740
	GRADIENT	.00020	-.01847	.00142	-.00108	-.00840	.00379	-.03061	.00000	-.00261



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. EN/L

(AEJ013) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 CREF = 20.1004 IN.  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 153 / 0 EN/L = 3.94 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.597	-5.018	.04890	.00950	-.00370	.00370	.00370	-.01510	.59230	474.60000	.01580
.597	-2.938	.04870	.05190	-.00340	.00410	.01870	-.00820	.59220	474.60000	.00600
.601	-.960	.04820	.01910	-.00130	-.00070	.00610	-.00270	.59220	474.60000	.00210
.601	.027	.04830	.00280	-.00080	-.00290	-.00240	.00220	.59190	474.60000	.00010
.601	1.040	.04760	-.01420	.00220	-.00510	-.00590	.00240	.59300	474.60000	-.00160
.600	3.051	.04610	-.04870	.00260	-.00820	-.01960	.00820	.59410	474.60000	-.00580
.600	5.060	.04510	-.00770	.00690	-.01360	-.03540	.01510	.59470	474.60000	-.01050
.599	7.105	.04160	-.12560	.00910	-.01770	-.03170	.02210	.59770	474.60000	-.01510
.599	9.123	.04120	-.16030	.01160	-.02190	-.06960	.02370	.59800	474.60000	-.01990
GRADIENT		-.00242	-.01653	.00097	-.00219	-.06628	.00269	.00032	.00000	-.00194

RUN NO. 150 / 0 EN/L = 4.21 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.799	-5.035	.04530	.09480	-.00710	.00880	.00590	-.01550	.59670	639.70000	.01120
.798	-3.009	.04660	.05670	-.00470	.00410	.00120	-.00840	.59550	639.70000	.00660
.799	-.987	.04710	.01980	-.00260	-.00060	.00740	-.00330	.59460	639.70000	.00240
.802	.029	.04820	.00030	-.00120	-.00160	.00390	-.00010	.59330	639.70000	.00020
.799	1.049	.04860	-.01830	.00240	-.00250	-.00650	.00280	.59350	639.70000	-.00190
.797	3.067	.04670	-.05390	.00290	-.00660	-.01930	.00860	.59450	639.70000	-.00610
.799	5.101	.04550	-.09360	.00390	-.01080	-.03450	.01510	.59560	639.70000	-.01160
.798	7.131	.04240	-.13140	.00890	-.01520	-.05230	.02270	.59810	639.70000	-.01550
.797	9.158	.03910	-.16870	.01080	-.01980	-.06920	.02390	.60100	639.70000	-.02000
GRADIENT		.00009	-.01825	.00127	-.00168	-.06662	.00291	-.00020	.00000	-.00209

RUN NO. 147 / 0 EN/L = 3.73 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.902	-5.034	.03790	.09990	-.00800	.01140	.00580	-.01620	.60320	613.50000	.01170
.904	-3.009	.03570	.05940	-.00530	.00430	.00110	-.00950	.60510	613.50000	.00690
.905	-.986	.03660	.01940	-.00260	.00180	.00740	-.00330	.60390	613.50000	.00240
.905	.029	.03740	.00050	-.00150	-.00090	.00690	-.00080	.60300	613.50000	.00030
.903	1.044	.03640	-.01860	.00230	-.00290	-.00650	.00280	.60390	613.50000	-.00190
.900	3.074	.03740	-.05350	.00250	-.00790	-.02080	.00820	.60330	613.50000	-.00640
.899	5.104	.03910	-.09700	.00360	-.01290	-.03570	.01590	.60140	613.50000	-.01120
.899	7.140	.03830	-.13740	.00770	-.01720	-.05140	.02270	.60200	613.50000	-.01570
.901	9.164	.03490	-.17420	.00930	-.02070	-.06430	.02870	.60460	613.50000	-.01960
GRADIENT		.00026	-.01885	.00127	-.00220	-.06688	.00307	-.00027	-.00000	-.00218

ARC 11-747 0453A B C H F W V NDM. RN/L

(REJ013) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = 10.000  
 AILRDN = 10.0  
 SPODRK = 25.000  
 ELEV = 10.0  
 ELEVON = 10.0  
 ELEVON = -11.700  
 ELEVON = 10.0  
 ELEVON = 10.0

RUN NO. 144/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	CLMFD	CY	CYN	CBL	CYV	CNV	XCF/L	Q	CBLV
1.055	-5.026	-0.2110	.03320	-0.00840	.01170	.03450	-0.0070	.64640	628.10000	.01200
1.055	-3.007	-0.2310	.05490	-0.02440	.00670	.01980	-0.0350	.64770	628.10000	.00690
1.055	-1.944	-0.2510	.01770	-0.00130	.00210	.00640	-0.0330	.64910	628.10000	.00230
1.054	.027	-0.2530	.00070	.00020	.00010	-0.00020	-0.0310	.64900	628.10000	.00020
1.056	1.047	-0.2580	.01780	.00120	.00190	-0.00730	-0.0310	.64930	628.10000	-0.0190
1.054	3.060	-0.2530	.05340	.00480	-0.0060	-0.02140	-0.0300	.64930	628.10000	-0.00680
1.051	5.097	-0.2300	.00120	.00020	.01200	-0.03790	.00750	.64770	628.10000	-0.01200
1.051	7.123	-0.2020	-12890	.01100	-0.0130	-0.05250	.00490	.64590	628.10000	-0.01680
1.055	9.150	-0.1820	-16180	.01270	-0.0210	-0.06750	.00140	.64470	628.10000	-0.02130
GRADIENT		-0.0031	-0.0179	.00143	-0.00217	-0.00678	.00320	.00019	.00000	-0.00224

RUN NO. 141/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	CLMFD	CY	CYN	CBL	CYV	CNV	XCF/L	Q	CBLV
1.204	-5.026	-0.2470	.03590	-0.00420	.02980	.03070	-0.01450	.65950	571.40000	.01040
1.200	-3.008	-0.2420	.05230	-0.02270	.00590	.01840	-0.00600	.65930	571.40000	.00580
1.200	-1.985	-0.2260	.02030	-0.00170	.00080	.00610	-0.01200	.66100	571.40000	.00230
1.199	.023	-0.2430	.00270	-0.00090	-0.00130	-0.00070	-0.0310	.66100	571.40000	.00020
1.199	1.042	-0.2430	.01370	.00020	.00310	-0.00640	.00070	.66110	571.40000	-0.00170
1.198	3.067	-0.2420	.04750	.00180	-0.00590	-0.01880	.00030	.66100	571.40000	-0.00580
1.197	5.089	-0.2180	.00020	.00340	-0.00950	-0.03160	.01460	.66050	571.40000	-0.01030
1.202	7.121	-0.2000	-11740	.00480	-0.01390	-0.04640	.00210	.65900	571.40000	-0.01470
1.201	9.146	-0.1790	-14910	.00450	-0.01710	-0.05880	.00270	.65840	571.40000	-0.01860
GRADIENT		-0.00440	-0.01646	.00074	-0.00194	-0.00612	.00281	.00026	-0.00000	-0.00190



DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V NON. RN/L

(AEJ014) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .03000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

ALPHA = 20.000  
 ATLRON = .000  
 SPDRK = 25.000  
 ELEV-L = .000  
 ELEV-R = .000  
 ELEVON = .000  
 BOFLAP = -11.700

## PARAMETRIC DATA

RUN NO. 152/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-5.004	.02710	.10360	-.01020	.03470	.03470	-.01590	.62260	476.90000	.01170
.601	-2.993	.02650	.06390	-.00660	.01760	.01900	-.00070	.62280	476.90000	.00660
.599	-.985	.02580	.02330	-.00260	.00200	.00590	-.00260	.62310	476.90000	.00200
.596	.024	.02570	.00440	-.00120	-.00080	-.00260	.00010	.62310	476.90000	.00000
.598	1.041	.02570	-.01420	.00020	-.00330	-.00620	.00270	.62310	476.90000	-.00180
.598	3.070	.02540	-.05450	.00410	-.00890	-.02010	.00900	.62320	476.90000	-.00640
.599	5.090	.02610	-.09380	.00850	-.01420	-.03650	.01630	.62290	476.90000	-.01150
.601	7.116	.02050	-.13030	.01140	-.01900	-.05130	.02300	.62500	476.90000	-.01610
.599	9.142	.01310	-.16610	.01370	-.02400	-.06840	.03040	.62780	476.90000	-.02080
GRADIENT	-.00017	-.01943	.00173	-.00271	-.00638	.00289	.00000	.00000	.00000	-.00212

RUN NO. 151/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.798	-5.049	.04860	.10300	.00400	.00950	.02270	-.01270	.61350	638.20000	.01000
.800	-3.014	.04710	.06050	.00010	.00560	.01620	-.00840	.61420	638.20000	.00630
.797	-.977	.04640	.01650	-.00210	.00130	.00700	-.00340	.61450	638.20000	.00250
.798	.035	.04630	-.00420	.00340	-.00150	.00200	-.00070	.61450	638.20000	.00070
.800	1.058	.04700	-.02180	.00420	-.00390	-.00280	.00170	.61420	638.20000	-.00110
.799	3.096	.04680	-.05620	.00680	-.00880	-.00950	.00570	.61420	638.20000	-.00440
.800	5.139	.04390	-.09190	.00840	-.01400	-.01700	.01010	.61530	638.20000	-.00790
.799	7.182	.04330	-.12840	.01090	-.01820	-.02330	.01390	.61550	638.20000	-.01090
.798	9.223	.04100	-.16570	.01390	-.01810	-.03370	.01900	.61630	638.20000	-.01420
GRADIENT	-.00001	-.01906	.00112	-.00238	-.00427	.00233	-.00001	-.00000	-.00000	-.00175

RUN NO. 146/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.056	.04310	.09900	.01220	.01350	.01020	-.00830	.61560	613.50000	.00730
.906	-3.011	.03670	.05610	.00480	.00770	.00890	-.00600	.61850	613.50000	.00490
.899	-.984	.03710	.01800	-.00060	.00200	.00580	-.00310	.61830	613.50000	.00230
.900	.034	.03570	-.00020	.00290	-.00020	.00250	-.00110	.61880	613.50000	.00080
.904	1.038	.03540	-.01950	.00500	-.00260	-.00070	.00280	.61890	613.50000	-.00060
.897	3.098	.03930	-.05050	.01000	-.00740	-.00500	.00390	.61730	613.50000	-.00320
.902	5.143	.03650	-.08400	.01520	-.01330	-.00870	.00700	.61840	613.50000	-.00590
.906	7.184	.04010	-.11820	.02120	-.01750	-.00830	.00830	.61790	613.50000	-.00740
.902	9.230	.04270	-.15530	.02520	-.02060	-.01640	.01200	.61580	613.50000	-.00980
GRADIENT	.00030	-.01754	.00242	-.00245	-.00237	.00165	-.00015	-.00000	-.00000	-.00134

ARC 11-747 0453A B C H F M V N M L R N/L

(REJ014) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRCON = .000 SDFLAP = -11.700  
 SPDGRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 145/0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.055	-5.039	-.05510	.09840	.00270	.01370	.00870	-.00210	.65070	627.60000	.00670
1.055	-3.012	-.06000	.06330	-.00020	.00860	.00570	-.00490	.65220	627.60000	.00410
1.055	-.930	-.06570	.03030	-.00300	.00060	.00220	-.00200	.65380	627.60000	.00180
1.052	.019	-.06250	.01030	-.00300	.00030	-.00010	-.00020	.65290	627.60000	.00040
1.052	1.049	-.06240	-.01290	-.00220	-.00100	-.00260	.00160	.65280	627.60000	-.00190
1.051	3.080	-.05850	-.04810	-.00300	-.00630	-.00700	.00100	.65170	627.60000	-.00370
1.049	5.121	-.05170	-.08520	-.00360	-.01200	-.01190	.00690	.64970	627.60000	-.00670
1.053	7.165	-.04730	-.11950	-.00320	-.01700	-.01850	.01340	.64840	627.60000	-.01020
1.051	9.196	-.04420	-.14520	-.01180	-.02030	-.02440	.01600	.64750	627.60000	-.01280
	GRADIENT	.00039	-.01858	-.00037	-.00220	-.00211	.00164	-.00012	.00000	-.00129

RUN NO. 142/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.202	-5.033	-.07130	.08950	.00720	.00860	.00190	-.00460	.65630	571.00000	.00420
1.205	-3.015	-.07560	.00950	.00200	.00520	.00200	-.00350	.65830	571.00000	.00310
1.204	-.988	-.07550	.02530	-.00110	.00150	.00050	-.00130	.65810	571.00000	.00130
1.202	.027	-.07390	.00620	-.00170	.00060	-.00060	.00000	.65770	571.00000	.00030
1.202	1.045	-.07570	-.01130	-.00250	-.00110	-.00210	.00100	.65820	571.00000	-.00060
1.199	3.078	-.07590	-.04200	-.00630	-.00560	-.00430	.00350	.65830	571.00000	-.00280
1.199	5.121	-.07470	-.07450	-.00940	-.00720	-.00430	.00500	.65800	571.00000	-.00430
1.201	7.157	-.06900	-.11040	-.01110	-.01100	-.00750	.00750	.65550	571.00000	-.00650
1.201	9.190	-.06690	-.14200	-.01560	-.01420	-.01510	.01160	.65530	571.00000	-.00920
	GRADIENT	-.00005	-.01679	-.00129	-.00172	-.00106	.00123	.00001	.00000	-.00097





DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

ARC 11-747 0453A B C M F W V LOW RN/L

(AEJ015) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 26.1004 IN.  
SCALE = .03000 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000  
AILRON = .000 BOFLAP = .000  
SPDBRK = 25.000 RUDDER = .000  
ELEV-L = .000 ELEV-R = .000

RUN NO. 324 / 0 RN/L = 1.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLAF/D	CY	CYN	CBL	CVY	CYNV	XCP/L	Q	CBV
.597	-.529	.04160	-.00180	.00040	-.00180	-.00740	.00230	.79350	208.70000	-.00050
.603	.089	.04170	-.00290	.00030	-.00180	-.00690	.00220	.86990	208.70000	-.00050
.604	1.102	.04170	-.00440	.00010	-.00200	-.00730	.00220	1.48200	208.70000	-.00040
.597	1.612	.04300	-.00110	-.00020	-.00220	-.00640	.00200	-2.67200	208.70000	-.00030
.605	3.553	.04350	-.00160	-.00040	-.00270	-.00560	.00190	.47140	208.70000	-.00040
.594	5.555	.04280	-.00150	-.00040	-.00270	-.00710	.00220	.55470	208.70000	-.00030
.601	7.601	.03890	-.00270	-.00090	-.00280	-.00650	.00200	.58610	208.70000	-.00050
.597	9.598	.03510	-.00190	-.00090	-.00310	-.00730	.00220	.60200	208.70000	-.00030
.598	12.595	.02710	-.00330	-.00120	-.00180	-.00690	.00210	.61540	208.70000	-.00030
.594	15.660	.02350	-.00300	-.00160	-.00160	-.00830	.00260	.62100	208.70000	-.00070
.604	18.700	.01550	-.00240	-.00180	-.00150	-.00780	.00240	.62840	208.70000	-.00060
.595	21.730	.01370	-.00410	-.00260	-.00050	-.00750	.00230	.62800	208.70000	-.00030
.601	24.680	.03850	-.00410	-.00270	-.00070	-.00620	.00180	.62050	208.70000	-.00020
.599	28.430	.11550	.00040	-.00390	-.00240	-.00400	.00110	.59480	208.70000	-.00000
GRADIENT		.00051	.00022	-.00021	-.00011	.00028	-.00010	-.24527	.00000	.00003

RUN NO. 319 / 0 RN/L = 2.06 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLAF/D	CY	CYN	CBL	CVY	CYNV	XCP/L	Q	CBV
.797	-.631	.04980	-.00200	-.00010	-.00190	-.00360	.00110	.80080	310.80000	-.00000
.802	.087	.04940	-.00270	.00000	-.00180	-.00410	.00120	.90070	310.80000	-.00010
.797	1.121	.04810	-.00260	-.00030	-.00220	-.00380	.00110	2.18800	310.80000	-.00010
.797	1.637	.04940	-.00250	-.00030	-.00230	-.00400	.00120	-1.12800	310.80000	-.00010
.802	3.591	.05000	-.00090	-.00070	-.00240	-.00270	.00080	.46750	310.80000	-.00010
.797	5.549	.04500	-.00250	-.00060	-.00280	-.00350	.00100	.55760	310.80000	-.00000
.800	7.624	.03850	-.00470	-.00020	-.00240	-.00360	.00110	.59020	310.80000	-.00020
.798	9.589	.03260	-.00430	-.00040	-.00250	-.00360	.00110	.61500	310.80000	-.00010
.801	12.620	.03040	-.00490	-.00110	-.00320	-.00380	.00110	.61320	310.80000	-.00000
.800	15.690	.01980	-.00120	-.00150	-.00350	-.00350	.00100	.62280	310.80000	-.00010
.796	18.720	.01790	-.00270	-.00020	-.00340	-.00340	.00100	.62530	310.80000	-.00000
.800	21.750	.03240	-.00230	-.00180	-.00360	-.00360	.00130	.62090	310.80000	-.00020
.798	24.690	.08450	-.00420	-.00280	-.00020	-.00480	.00130	.60320	310.80000	-.00010
.797	28.610	.12090	.00130	-.00480	-.00190	-.00340	-.00050	.59240	310.80000	-.00000
GRADIENT		.00008	.00032	-.00016	-.00014	.00024	-.00008	-.18147	.00000	.00003

ARC 11-747 QAS3A B C M F M V LOW RN/L

(AE 3515) (12 MAR 74)

## REFERENCE DATA

SKRF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 CLEVON = .0000  
 ALLCON = .0000 EDPLAR = .0000  
 SPOERK = 25.0000 LODER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 318/ 0 RN/L = 2.18 GRADIENT INTERVAL = 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CELV
.899	-.637	.05450	.00070	-.00100	-.00180	-.00410	.00110	.03230	355.80000	-.00010
.900	.083	.05060	-.00040	-.00060	-.00200	-.00350	.00100	.00150	355.80000	.00000
.905	1.027	.04410	.00210	-.00090	-.00240	-.00300	.00080	-2.34500	355.80000	.00010
.905	1.586	.04310	.00100	-.00090	-.00250	-.00340	.00090	.15900	355.80000	.00010
.905	3.553	.04340	.00100	-.00140	-.00230	-.00380	.00100	.51410	355.80000	.00000
.905	5.557	.04050	-.00120	-.00100	-.00240	-.00370	.00110	.56840	355.80000	-.00020
.899	7.606	.03190	-.00290	-.00080	-.00120	-.00350	.00110	.59840	355.80000	-.00010
.904	9.566	.02760	-.00240	-.00130	-.00070	-.00360	.00100	.60950	355.80000	-.00020
.898	12.610	.01580	-.00250	-.00080	-.00150	-.00330	.00090	.62280	355.80000	-.00000
.898	15.680	.00380	-.00210	-.00190	-.00180	-.00310	.00090	.63090	355.80000	.00000
.907	18.670	.00190	-.00170	-.00230	-.00050	-.00220	.00050	.63230	355.80000	.00020
.898	20.730	.01480	-.00200	-.00230	-.00090	-.00320	.00080	.62710	355.80000	.00000
.901	24.700	.00190	.01500	-.00100	-.00440	.00150	-.00520	.60430	355.80000	.00390
.903	28.620	.10350	.00910	-.00660	-.00020	.00460	-.00270	.60030	355.80000	.00220
GRADIENT	-.00266	-.00019	-.00022	-.00012	-.00003	.00003	-.00002	-.00267	.00000	.00002

RUN NO. 313/ 0 RN/L = 2.27 GRADIENT INTERVAL = 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CELV
1.051	-.637	.05380	.00070	-.00130	-.00240	-.00080	-.00040	.01850	408.90000	.00040
1.054	.051	.04560	-.00080	-.00030	-.00250	-.00090	-.00010	1.25800	408.90000	.00020
1.052	1.069	.03340	.00010	-.00060	-.00250	-.00080	-.00040	.34010	408.90000	.00040
1.058	1.584	.02570	.00020	-.00050	-.00240	.00050	-.00030	.51660	408.90000	.00030
1.050	3.553	.00550	.00020	-.00070	-.00240	.00090	-.00050	.52280	408.90000	.00040
1.053	5.509	.00130	-.00030	-.00110	-.00200	.00110	-.00050	.64780	408.90000	.00050
1.053	7.574	-.02490	.00020	-.00120	-.00170	.00120	-.00060	.65350	408.90000	.00050
1.052	9.550	-.03100	-.00060	.00130	.00020	-.00080	.00040	.65380	408.90000	-.00010
1.052	11.550	-.04010	-.00090	.00130	.00020	-.00110	.00070	.65520	408.90000	-.00030
1.051	15.650	-.05490	.00090	-.00120	.00050	-.00050	-.00030	.65550	408.90000	.00040
1.051	18.680	-.07660	.01310	-.00550	-.00320	.00050	-.00090	.65890	408.90000	.00080
1.049	21.700	-.07110	-.00090	-.00040	.00150	-.00050	.00070	.65410	408.90000	.00010
1.050	24.660	-.04450	.00080	-.00060	.00040	-.00140	.00080	.64520	408.90000	-.00030
1.045	28.610	.01610	.00650	-.00200	.00000	-.00130	.00010	.62640	408.90000	.00010
GRADIENT	-.01165	.00001	-.00001	-.00010	.00001	.00009	-.00005	-.11983	.00000	.00002



(AEJ015) (12 MAR 74)

ARC 11-747 0453A B C M F W V LOW RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .0020 ELEVON = .0000  
AILRON = .0000 BOFLAP = .0000  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = .0000 ELEV-R = .0000

RUN NO. 312/0 RN/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.193	-1.651	.03920	.00050	.00000	-.00240	-.00080	.00010	.90630	438.90000	.00020
1.197	.060	.02940	-.00040	-.00010	-.00250	-.00090	.00010	2.02500	438.90000	.00020
1.201	1.068	.01550	.00010	-.00010	-.00210	-.00060	.00020	.53160	438.90000	.00020
1.201	1.587	.00960	.00040	-.00020	-.00210	-.00060	.00010	.59150	438.90000	.00020
1.201	3.519	-.01210	.00030	-.00040	-.00180	-.00030	-.00010	.65460	438.90000	.00020
1.201	5.506	-.02930	.00020	-.00060	-.00110	-.00050	.00000	.66670	438.90000	.00020
1.201	7.573	-.04270	.00130	-.00070	-.00110	-.00120	.00020	.66910	438.90000	.00010
1.197	9.540	-.05090	.00170	-.00080	-.00160	-.00140	.00030	.66730	438.90000	.00010
1.196	12.570	-.06130	-.00010	-.00080	-.00040	-.00110	.00030	.66450	438.90000	.00010
1.197	15.650	-.07560	.00130	-.00090	.00010	.00010	.00050	.66450	438.90000	.00010
1.194	18.680	-.08550	.00270	-.00160	.00080	-.00170	.00050	.66310	438.90000	.00000
1.195	21.670	-.08210	.00370	-.00140	.00120	-.00190	.00060	.65860	438.90000	-.00010
1.195	24.660	-.06890	.00460	-.00110	.00060	-.00220	.00080	.65260	438.90000	-.00020
1.194	28.570	-.05380	.00740	-.00260	.00060	.00020	-.00010	.64680	438.90000	.00030
	GRADIENT	-.01228	.00004	-.00009	.00016	.00014	-.00005	-.18723	.00000	.00000

ARC 11-747 0433A B C M F W L Y NDM. RN/L

(AEJ016) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 CREF = 14.2440 IN.  
 BREF = 26.1004 IN.  
 SCALE = 1.0000 SCALE

YMRP = 32.3010 IN.  
 YMRP = 10000 IN.  
 YMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = 1000  
 ALPHA = 1000  
 SPDRK = 25.000  
 ELEV = 1000

RUN NO. 3217 0 RN/L = 3.98 GRADIENT INTERVAL = 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CANV	XCP/L	TSV
.597	-1.590	.04190	-.00010	.00000	-.00210	-.00340	.00100	.79550	.00010
.600	-1.111	.04060	-.00130	-.00010	-.00220	-.00430	.00110	.66160	-.00030
.598	1.129	.04060	.00080	-.00020	-.00210	-.00380	.00110	.21430	-.00120
.603	1.825	.04050	.00140	-.00020	-.00230	-.00390	.00111	-.53360	-.00120
.599	3.582	.04070	.00030	-.00040	-.00270	-.00340	.00100	.49570	-.00010
.599	5.544	.03920	-.00070	-.00060	-.00290	-.00350	.00100	.56320	-.00020
.599	7.605	.03630	-.00070	-.00080	-.00320	-.00360	.00090	.59320	-.00010
.597	9.595	.03280	-.00160	-.00060	-.00340	-.00320	.00110	.61430	-.00030
.599	12.600	.02860	-.00330	-.00050	-.00360	-.00390	.00120	.64000	-.00010
.599	15.680	.02340	.00250	-.00210	-.00390	-.00440	.00130	.67000	-.00020
.594	18.700	.01420	.00360	-.00290	-.00490	-.00430	.00130	.62700	-.00030
.598	21.700	.01490	.00360	-.00170	-.00210	-.00360	.00080	.52750	-.00010
.598	24.700	.03650	-.00070	-.00080	-.00110	-.00330	.00090	.62130	-.00010
.597	26.650	.11560	.00430	-.00230	-.00220	-.00320	.00110	.59440	.00000
GRADIENT		-.00000	.00010	-.00000	-.00014	.00007	-.00003	-.14469	.00012

RUN NO. 3207 0 RN/L = 4.22 GRADIENT INTERVAL = 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CANV	XCP/L	TSV
.801	-.664	.04320	.00060	-.00030	-.00210	-.00120	.00030	.641.10000	.00020
.798	.084	.04830	-.00010	-.00030	-.00220	-.00230	.00030	.641.10000	-.00010
.803	1.034	.04750	.00110	-.00060	-.00220	-.00140	.00030	.216700	.00010
.803	1.632	.04770	.00120	-.00050	-.00240	-.00210	.00060	-.58430	.00000
.799	3.579	.04600	.00070	-.00070	-.00290	-.00180	.00050	.41600	.00010
.798	5.576	.04170	.00100	-.00070	-.00330	-.00190	.00060	.58170	.00000
.799	7.635	.03540	-.00010	-.00080	-.00350	-.00190	.00060	.59370	.00000
.797	9.619	.03210	-.00050	-.00090	-.00140	-.00210	.00060	.61580	.00010
.799	12.620	.03180	-.00100	-.00140	-.00330	-.00180	.00050	.61250	.00010
.795	15.700	.02650	-.00100	-.00240	-.00240	-.00100	.00030	.62240	.00010
.801	18.760	.01970	-.00260	-.00290	-.00240	-.00110	.00030	.62450	.00010
.796	21.720	.03550	-.00350	-.00360	-.00260	-.00070	.00040	.61970	.00010
.797	24.690	.09120	.00150	-.00070	-.00470	.00060	.00030	.641.10000	.00010
.799	26.640	.11900	.00830	-.00370	-.00190	.00160	.00030	.641.10000	.00010
GRADIENT		-.00071	.00012	-.00010	-.00019	-.00007	.00003	.15471	.00010



DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

ARC 11-747 Q453A B C M F W V NOM. RN/L

(AEJ016) (12 MAR 74)

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## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILERON = .000 BDFLAP = .000  
 SPCBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 317 / 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.940	-1.666	.05330	.00100	-.00080	-.00210	-.00090	.00010	.83670	611.60000	.00030
.945	.076	.04990	.00020	-.00080	-.00230	-.00180	.00040	.96600	611.60000	.00000
.942	1.085	.04520	.00040	-.00090	-.00250	-.00150	.00030	-1.96900	611.60000	.00020
.941	1.604	.04310	.00080	-.00100	-.00250	-.00090	.00010	.22110	611.60000	.00030
.942	3.544	.03810	.00070	-.00120	-.00280	-.00190	.00020	.53620	611.60000	.00020
.941	5.531	.03680	-.00020	-.00100	-.00300	-.00130	.00030	.57760	611.60000	.00010
.940	7.598	.02790	-.00090	-.00090	-.00220	-.00150	.00030	.64400	611.60000	.00010
.899	9.564	.02730	-.00020	-.00140	-.00260	-.00200	.00060	.61020	611.60000	.00000
.940	12.590	.01770	-.00190	-.00110	-.00220	-.00110	.00030	.62170	611.60000	.00020
.943	15.670	.02400	-.00160	-.00220	-.00070	-.00120	.00030	.63080	611.60000	.00020
.898	18.680	.00590	-.00110	-.00250	.00000	.00010	-.00020	.50030	611.60000	.00050
.899	21.720	.02330	-.00250	-.00290	.00110	.00090	-.00060	.62420	611.60000	.00080
.901	24.720	.08820	.00770	-.00610	-.00220	.00090	-.00090	.60170	611.60000	.00150
.942	28.620	.10440	.00860	-.00360	.00010	.00020	-.00140	.60000	611.60000	.00120
GRADIENT		-.00362	.00000	-.00010	-.00016	-.00002	-.00001	-.00938	.00000	.00001

RUN NO. 314 / 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
1.047	-1.655	.05180	.00060	-.00040	-.00230	.00060	-.00040	.90280	623.90000	.00030
1.052	.067	.04410	-.00050	-.00040	-.00280	.00080	-.00040	1.33100	623.90000	.00030
1.052	1.067	.03110	-.00010	-.00060	-.00250	.00020	-.00060	.37420	623.90000	.00040
1.049	1.588	.02430	-.00080	-.00040	-.00240	.00060	-.00030	.52010	623.90000	.00030
1.051	3.534	.02280	.00100	-.00060	-.00250	.00010	-.00080	.62770	623.90000	.00050
1.051	5.518	-.01640	.00050	-.00100	-.00220	.00080	-.00080	.65110	623.90000	.00050
1.052	7.570	-.02930	.00230	-.00110	-.00170	.00190	-.00080	.65700	623.90000	.00050
1.052	9.556	-.03560	.00080	-.00070	-.00200	.00020	-.00100	.65660	623.90000	.00060
1.051	12.590	-.04320	-.00150	-.00030	-.00010	.00000	-.00080	.65510	623.90000	.00050
1.051	15.640	-.05460	.00210	-.00090	.00120	.00100	-.00050	.65540	623.90000	.00040
1.048	18.680	-.06070	.00090	-.00070	-.00060	.00020	-.00110	.65640	623.90000	.00080
1.049	21.690	-.06730	.00080	-.00030	-.00070	-.00030	-.00070	.65310	623.90000	.00030
1.048	24.670	-.04110	.00010	.00030	.00040	-.00140	.00080	.64430	623.90000	-.00050
1.049	28.620	.01290	-.00070	.00040	.00020	-.00140	.00010	.62920	623.90000	-.00020
GRADIENT		-.01183	.00015	-.00005	.00000	.00023	-.00009	-.12281	.00000	.00005

## REFERENCE DATA

3REF = 2.4210 SQ.FT.      XMRP = 32.3010 IN.  
 1REF = 1.4240 IN.        YMRP = .0000 IN.  
 2REF = 28.1004 IN.        ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

### PARAMETRIC DATA

```
BETA = .000
ALPHA = .000
ELEVON = .000
DELTA = .000
ROTOR = 25.000
ELEV-R = .000
```

ALPHA	CLF4C	CY	CYN	CBL	CYV	CNV	KCP/L	Q	CBLV
-1.650	.03600	.00120	-.00010	-.00020	-.00060	.00000	.69270	576.70000	.00020
.051	.02690	-.00080	-.00010	-.00020	-.00080	.00010	1.27800	576.70000	.00010
1.172	.00340	-.00010	-.00010	-.00010	-.00010	-.00010	.54120	576.70000	.00020
1.565	.00790	-.00010	-.00010	-.00020	-.00060	.00000	.59850	576.70000	.00020
1.1200	-.00130	-.00010	-.00020	-.00010	-.00010	-.00010	.65750	576.70000	.00030
5.523	-.03100	.00140	-.00060	-.00120	-.00070	.00010	.56850	576.70000	.00020
7.571	-.04440	.00100	-.00060	-.00050	-.00070	.00010	.67050	576.70000	.00020
9.532	-.05180	.00150	-.00080	-.00160	-.00090	.00020	.66800	576.70000	.00020
12.590	-.06160	.00250	-.00100	-.00120	-.00090	.00020	.66470	57.70000	.00010
15.600	-.07510	.00170	-.00060	.00040	-.00010	.00010	.86420	57.70000	.00010
18.670	-.08450	.00450	-.00140	.00100	-.00150	.00040	.66300	576.70000	.00010
21.670	-.08150	.00230	-.00050	.00010	-.00090	.00060	.65850	576.70000	-.00010
24.660	-.06820	.00430	-.00080	.00130	-.00070	.00010	.65250	576.70000	-.00030
26.600	-.05290	.00600	-.00170	.00060	-.00120	.00020	.54660	576.70000	.00010
30.180	-.03180	-.00010	-.00002	.00007	.00009	-.00003	-.16317	.00000	.00003

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C H F M V HIGH RN/L (AEJ017) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1024 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
AILRON = .0000 BDFLAP = .0000  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = .0000 ELEV-R = .0000

RUN NO. 322/0 RN/L = 6.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVN	CCP/L	Q	CBLV
.537	-5.92	.03990	.00070	-.00020	-.00210	.00260	.79700	781.20000	.00000
.537	-1.90	.03970	-.00040	-.00010	-.00240	.00260	.88680	781.20000	-.00010
.537	1.147	.03920	.00140	-.00030	-.00260	.00240	2.79400	781.20000	.00000
.535	1.602	.03910	.00200	-.00020	-.00250	.00250	-.22190	781.20000	.00000
.537	3.564	.03460	.00040	-.00050	-.00270	.00220	.50580	781.20000	.00010
.536	5.538	.03730	.00060	-.00070	-.00310	.00240	.56710	781.20000	.00000
.536	7.605	.03560	.00100	-.00090	-.00330	.00250	.59080	781.20000	.00000
.537	9.587	.03400	.00230	-.00080	-.00390	.00260	.60300	781.20000	.00000
.536	12.600	.03060	.00040	-.00030	-.00420	.00270	.61370	781.20000	-.00010
.537	15.670	.02260	.00220	-.00140	-.00420	.00270	.62170	781.20000	-.00010
.538	18.720	.01770	.00310	-.00130	-.00420	.00280	.62340	781.20000	-.00020
.535	21.710	.01770	.00470	-.00100	-.00430	.00270	.62660	781.20000	-.00010
.535	24.710	.03870	.00080	-.00010	-.00420	.00250	.62040	781.20000	.00000
.537	28.640	.11680	.00260	-.00260	-.00160	.00230	.59430	781.20000	.00040
	GRADIENT	-.00232	.00001	-.00008	-.00027	.00031	-.12538	.00000	.00003

RUN NO. 321/0 RN/L = 5.43 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CVN	CCP/L	Q	CBLV
.799	-1.605	.04860	.00000	-.00030	-.00210	.00230	.81310	830.90000	.00010
.803	.097	.04840	-.00010	-.00040	-.00230	.00250	.90630	830.90000	-.00010
.804	1.088	.04720	.00150	-.00070	-.00240	.00230	1.98000	830.90000	.00010
.799	1.644	.04670	.00100	-.00070	-.00250	.00230	-.54790	830.90000	.00010
.798	3.567	.04490	.00130	-.00080	-.00290	.00240	.49140	830.90000	.00010
.799	5.564	.04110	.00080	-.00090	-.00330	.00240	.56630	830.90000	.00010
.796	7.602	.03520	.00200	-.00080	-.00350	.00230	.59510	830.90000	.00010
.800	9.581	.03150	-.00110	-.00030	-.00180	.00240	.60670	830.90000	.00010
.799	12.620	.03190	.00040	-.00180	-.00280	.00230	.61270	830.90000	.00010
.799	15.690	.02050	.00100	-.00200	-.00110	.00230	.62260	830.90000	.00010
.793	18.700	.01990	-.00280	-.00280	-.00100	.00230	.62470	830.90000	.00030
.798	21.740	.03720	-.00430	-.00310	-.00100	-.00260	.61910	830.90000	.00080
.799	24.670	.08890	.00740	-.00700	-.00300	-.00240	.60150	830.90000	.00210
.798	28.690	.11980	.00640	-.00470	-.00130	-.00210	.59290	830.90000	.00160
	GRADIENT	-.00293	.00035	-.00012	-.00018	.00004	-.15729	.00001	.00002

DATE 26 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 1/6

ARC 11-747 QAS3A B C M F W V HIGH RN/L

(45J017) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1804 IN.  
 SCALE = .0200 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 YMRP = 11.2900 IN.

BETA = .0000 ELEVON = .0000  
 AILSON = .0000 BOFLAP = .0000  
 SPDRK = 25.0000 RUDBER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 316/ 0 RN/L = 4.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLD	CY	CYN	CEL	CYV	CYNV	XCP/L	Q	CBV
.901	-6.75	.05320	.00310	-.00280	-.00220	.00110	-.00260	.83660	783.10000	.00050
.898	.077	.05030	.00100	-.00080	-.00240	.00070	-.00040	.96760	783.10000	.00030
.901	1.033	.04540	.00150	-.00110	-.00250	.00170	-.00080	-2.35400	783.10000	.00050
.899	1.607	.04340	.00150	-.00110	-.00240	.00110	-.00050	.17640	783.10000	.00040
.900	3.538	.03610	.00130	-.00130	-.00270	.00220	-.00090	.54410	783.10000	.00060
.900	5.927	.03330	.00080	-.00100	-.00380	.00210	-.00070	.58390	783.10000	.00050
.903	7.535	.02460	.00060	-.00110	-.00260	.00180	-.00070	.60770	783.10000	.00040
.900	9.575	.02590	.00020	-.00160	-.00110	.00070	-.00070	.61160	783.10000	.00020
.900	12.590	.02090	-.00150	-.00280	-.00230	.00150	-.00060	.61980	783.10000	.00040
.900	15.640	.00400	-.00170	-.00100	-.00240	.00110	-.00050	.63080	783.10000	.00040
.903	18.710	.00380	-.00100	-.00190	-.00100	.00140	-.00070	.63120	783.10000	.00050
.901	21.730	.02380	-.00460	-.00120	-.00100	.00310	-.00090	.62410	783.10000	.00080
.900	24.720	.00490	.00000	-.00540	-.00160	.00340	-.00280	.61280	783.10000	.00180
.903	28.670	.00420	.00630	-.00260	-.00040	.00090	-.00080	.60010	783.10000	.00060
GRADIENT		-.00410	-.00016	-.00013	-.00210	.00029	-.00008	-.10074	.00000	.00004

RUN NO. 315/ 0 RN/L = 4.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLD	CY	CYN	CEL	CYV	CYNV	XCP/L	Q	CBV
1.053	-6.56	.05180	.00070	-.00240	-.00280	.00260	-.00040	.90940	812.60000	.00030
1.053	.073	.04320	.00020	-.00030	-.00280	.00050	-.00030	1.34200	812.60000	.00010
1.048	1.083	.02950	.00010	-.00040	-.00260	.00020	-.00020	.40300	812.60000	.00020
1.052	1.598	.02280	.00010	-.00040	-.00280	.00040	-.00030	.53340	812.60000	.00020
1.054	3.548	.00070	.00080	-.00070	-.00220	.00050	-.00040	.53150	812.60000	.00030
1.050	7.526	-.01770	.00130	-.00090	-.00220	.00110	-.00060	.55240	812.60000	.00040
1.050	7.583	-.03330	.00170	-.00100	-.00130	.00120	-.00060	.55980	812.60000	.00040
1.050	9.563	-.03780	.00130	-.00080	-.00130	.00070	-.00040	.65780	812.60000	.00030
1.052	12.580	-.04240	.00000	-.00020	-.00280	.00070	-.00030	.65480	812.60000	.00030
1.050	15.640	-.05370	.00030	-.00040	-.00150	.00020	-.00020	.65520	812.60000	.00030
1.057	18.690	-.06300	.00520	-.00170	-.00110	.00110	-.00050	.65520	812.60000	.00060
1.050	21.700	-.06340	.00160	-.00020	-.00110	.00090	-.00030	.65210	812.60000	.00070
1.053	24.690	-.03840	.00170	-.00010	.00070	-.00040	-.00030	.64360	812.60000	.00020
1.051	28.620	.00180	.00070	.00010	.00180	-.00150	-.00020	.62950	812.60000	.00010
GRADIENT		-.01225	.00007	-.00008	.00010	-.00002	-.00001	-.10054	.00000	.00000





DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V HIGH RN/L

(AEJ017) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    WREF = 32.3010 IN.  
 LREF = 14.2440 IN.    YREF = .0000 IN.  
 BREF = 26.1004 IN.    ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMET IC DATA

BETA = .000    ELEWON = .000  
 AILRON = .000    BDFLAP = .000  
 SPDBRK = 25.000    RUDDER = .000  
 ELEV-L = .000    ELEV-R = .000

RUN NO. 310/0    RN/L = 4.77    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFO	CT	CYN	CBL	CYV	CYVW	WCP/L	Q	CBLY
1.196	-1.653	-0.3700	.00030	-.00020	-.00240	.00020	-.00020	.90960	814.80000	.00030
1.204	.051	.02600	.00000	-.00020	-.00230	-.00110	.00020	1.78700	814.80000	.00030
1.201	1.082	.01400	.00040	-.00020	-.00250	-.00050	.00000	.54090	814.80000	.00010
1.203	1.573	.00830	-.00040	-.00010	-.00190	-.00040	.00000	.59730	814.80000	.00020
1.202	3.519	-.01200	.00090	-.00030	-.00170	.00000	-.00020	.65450	814.80000	.00020
1.204	5.501	-.03130	.00150	-.00040	-.00160	-.00040	-.00010	.66900	814.80000	.00020
1.199	7.568	-.04710	.00130	-.00050	-.00110	-.00030	.00000	.67240	814.80000	.00020
1.199	9.551	-.05510	.00240	-.00100	-.00230	-.00020	.00000	.66980	814.80000	.00020
1.198	12.550	-.06380	-.00470	.00240	.00290	.00000	-.00010	.66580	814.80000	.00010
1.198	15.630	-.07280	.00170	-.00030	.00070	-.00100	.00020	.66340	814.80000	.00010
1.196	18.680	-.08230	.00380	-.00100	.00100	-.00130	.00040	.66200	814.80000	.00010
1.197	21.670	-.08810	.00280	.00020	.00220	-.00160	.00060	.65810	814.80000	-.00010
1.199	24.660	-.09530	.00450	-.00020	.00180	-.00170	.00080	.65170	814.80000	-.00010
1.198	28.580	-.09820	.00710	-.00150	.00120	-.00100	-.00040	.64590	814.80000	.00050
	GRADIENT	-.01165	.00011	-.00002	.00017	.00006	-.00003	-.16373	.00000	.00000

ARC 11-747 QAS3A B C M F M V LOW RML

(AEJ018) (12 MAY 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = 0.0000 SCALE

XREF = 32.3510 IN.  
 YREF = 0.0000 IN.  
 ZREF = 11.2500 IN.

## PARAMETRIC DATA

BETA = 100 ELEVON = -20.000  
 ALLORN = 100 EOLAP = -1.700  
 SPDRK = 25.0000 YORDER = 100  
 ELEV-L = -20.000 ELEV-H = -20.000

RUN NO. 339/0 RML = 1.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF40	CY	CYN	CBL	CYV	CYN	ACF/L	Q	CBLV
.597	-6.7	.19530	.00000	-.00010	-.00490	.00110	-.00050	.80590	208.10000	.00060
.599	-1.05	.19650	-.00100	-.00030	-.00490	.00060	-.00030	.81990	208.10000	.00050
.603	1.136	.19400	-.00120	-.00030	-.00510	.00070	-.00040	.84810	208.10000	.00050
.603	1.615	.19390	-.00220	-.00050	-.00530	.00090	-.00040	.86560	208.10000	.00050
.603	3.591	.19140	-.00170	-.00080	-.00510	.00120	-.00060	.97380	208.10000	.00060
.599	5.556	.19420	-.00280	-.00110	-.00490	.00060	-.00030	1.26300	208.10000	.00050
.597	7.628	.19300	.00040	-.00160	-.00510	.00060	-.00040	6.05600	208.10000	.00050
.597	9.602	.19460	-.00140	-.00160	-.00490	.00030	-.00030	1.13300	208.10000	.00050
.599	12.660	.19700	-.00420	-.00010	-.00420	.00090	-.00050	.35940	208.10000	.00060
.599	15.710	.18360	-.00190	-.00170	-.00340	.00050	-.00030	.47510	208.10000	.00050
.596	18.750	.18220	-.00220	-.00290	-.00350	.00040	-.00020	.51810	208.10000	.00050
.596	21.750	.18510	-.00100	-.00340	-.00410	.00040	-.00030	.54220	208.10000	.00060
.598	24.710	.20420	-.00100	-.00320	-.00470	.00010	-.00020	.54740	208.10000	.00040
.596	28.250	.25750	-.00490	-.00320	-.00290	-.00010	-.00020	.52280	208.10000	.00040
	GRADIENT	-.00109	.00041	-.00016	-.00026	.00007	-.00004	.04024	.00000	.00001

RUN NO. 334/0 RML = 2.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF40	CY	CYN	CBL	CYV	CYN	ACF/L	Q	CBLV
.603	-6.33	.20530	.00200	-.00150	-.00400	.00190	-.00070	.82520	312.30000	.00050
.759	.090	.20330	.00180	-.00140	-.00370	.00210	-.00070	.84400	312.30000	.00050
.803	1.135	.20090	.00390	-.00130	-.00360	.00190	-.00080	.88170	312.30000	.00050
.810	1.606	.19810	.00210	-.00150	-.00350	.00190	-.00080	.91040	312.30000	.00050
.803	3.597	.19290	.00420	-.00130	-.00310	.00180	-.00070	1.13700	312.30000	.00050
.803	5.596	.18720	.00160	-.00160	-.00320	.00170	-.00060	2.02940	312.30000	.00040
.803	7.589	.17690	.00170	-.00160	-.00340	.00280	-.00090	.28690	312.30000	.00050
.802	12.620	.15520	.00240	-.00200	-.00340	.00210	-.00070	.33740	312.30000	.00050
.807	15.700	.13810	-.00200	-.00230	-.00130	.00220	-.00090	.40160	312.30000	.00040
.802	18.740	.13720	.00020	-.00350	-.00090	.00360	-.00120	.54210	312.30000	.00050
.798	21.750	.15830	-.00220	-.00230	-.00290	.00280	-.00100	.58150	312.30000	.00070
.801	24.750	.21810	-.00230	-.00310	-.00140	.00250	-.00100	.56390	312.30000	.00060
.801	28.670	.24430	.00340	-.00540	-.00030	.00410	-.00180	.54200	312.30000	.00060
	GRADIENT	-.00297	.00052	-.00003	-.00020	-.00004	-.00000	.06193	.00000	.00000



DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V LOW RN/L

(AEJ518) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. ZMEF = 32.3515 IN.  
 LREF = 14.2415 IN. YMEF = 10000 IN.  
 BREF = 26.1024 IN. ZMEF = 11.2500 IN.  
 SCALE = 10000 SCALE

## PARAMETRIC DATA

BETA = 1.000 ELEV-N = -20.000  
 ALLORN = 1.000 BOFLAP = -111.700  
 SPDRK = 25.000 RUDDER = 1.000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 333/0 RN/L = 2.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMC	CL	CYN	CBL	CYV	CTNV	KCP/L	Q	CBLV
1.032	1.637	22.15	10280	-102130	-102280	102230	-102110	84060	357.90000	100070
1.033	1.637	21.75	102190	-102190	-102290	102110	-102060	86170	357.90000	100050
1.034	1.637	21.35	102400	-102140	-102240	102140	-102070	94510	357.90000	100060
1.035	1.615	20.70	102160	-102150	-102210	102130	-102080	93380	357.90000	100060
1.036	1.596	20.30	102310	-102170	-102350	102170	-102090	112110	357.90000	100080
1.037	1.574	19.90	102270	-102180	-102370	102190	-102100	410740	357.90000	100070
1.038	1.554	19.50	102190	-102190	-102360	102140	-102070	28320	357.90000	100050
1.039	1.537	19.10	102190	-102190	-102210	102130	-102050	45650	357.90000	100040
1.040	1.520	18.70	102360	-102250	-102270	102150	-102070	54310	357.90000	100050
1.041	1.503	18.30	102110	-102370	-102370	102140	-102060	56750	357.90000	100070
1.042	1.486	17.90	102140	-102370	-102250	102270	-102110	57080	357.90000	100070
1.043	1.469	17.50	102290	-102790	-102250	10220	-102290	54830	357.90000	100210
1.044	1.452	17.10	102390	-102790	-102120	102300	-102230	54270	357.90000	100190
1.045	1.435	16.70	10210	-102613	-102317	-10223	-102201	10752	100000	100001

RUN NO. 328/0 RN/L = 2.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMC	CL	CYN	CBL	CYV	CTNV	KCP/L	Q	CBLV
1.032	1.637	22.15	10280	-102130	-102280	102230	-102110	84060	419.80000	100070
1.033	1.637	21.75	102190	-102190	-102290	102110	-102060	89960	419.80000	100050
1.034	1.637	21.35	102400	-102140	-102240	102140	-102070	96790	419.80000	100060
1.035	1.615	20.70	102160	-102150	-102210	102130	-102080	110210	419.80000	100040
1.036	1.596	20.30	102310	-102170	-102350	102170	-102090	212970	419.80000	100050
1.037	1.574	19.90	102270	-102180	-102370	102190	-102100	16330	419.80000	100050
1.038	1.554	19.50	102190	-102190	-102210	102130	-102050	42800	419.80000	100070
1.039	1.537	19.10	102190	-102190	-102120	102130	-102050	51510	419.80000	100150
1.040	1.520	18.70	102360	-102250	-102270	102150	-102070	56870	419.80000	100060
1.041	1.503	18.30	102110	-102370	-102250	102200	-102260	58430	419.80000	100070
1.042	1.486	17.90	102390	-102790	-102120	102160	-102270	61430	419.80000	100060
1.043	1.469	17.50	10210	-102613	-102317	-10223	-102201	61200	419.80000	100010
1.044	1.452	17.10	102290	-102790	-102250	102300	-102230	61680	419.80000	100050
1.045	1.435	16.70	10210	-102180	-102317	-10223	-102201	59360	419.80000	100010
1.047	1.418	16.30	10245	-102226	-102326	102261	-102202	23770	100000	100000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V LOW RN/L

(AEJ018) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVW = -20.000  
ALLROW = .0000 BDFLAP = -11.700  
SPBRK = 25.0000 CUDDER = .0000  
ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 327/0 RN/L = 2.31 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLD	CY	CYN	CBL	CVV	CYV	CYV	XCP/L	Q	CBV
1.203	-1.628	.17120	.00360	-.00070	-.00250	.00080	-.00050	.87780	442.90000	.00050	
1.205	.063	.15950	.00210	-.00240	-.00200	.00110	-.00050	.91210	442.90000	.00050	
1.203	1.091	.14540	.00360	-.00080	-.00200	.00170	-.00080	1.00500	442.90000	.00070	
1.204	1.094	.13930	.00450	-.00130	-.00210	.00180	-.00090	1.09100	442.90000	.00070	
1.204	3.537	.11890	.00440	-.00220	-.00250	.00160	-.00090	-5.77900	442.90000	.00070	
1.204	5.534	.09900	.00500	-.00220	-.00200	.00160	-.00090	.34160	442.90000	.00070	
1.202	7.586	.08350	.00370	-.00230	-.00210	.00090	-.00060	.56790	442.90000	.00060	
1.196	9.579	.07160	.00230	-.00190	-.00170	.00050	-.00060	.56030	442.90000	.00060	
1.199	12.600	.05350	.00390	-.00200	-.00170	.00110	-.00060	.59680	442.90000	.00060	
1.201	15.650	.03460	.00450	-.00220	-.00140	-.00070	-.00070	.61710	442.90000	.00060	
1.198	18.690	.02320	.00310	-.00150	-.00010	-.00040	.00030	.62310	442.90000	.00010	
1.198	21.690	.02740	.00100	-.00080	.00040	-.00020	.00110	.62280	442.90000	-.00030	
1.193	24.650	.03370	-.00240	.00120	.00020	-.00030	.00160	.62190	442.90000	-.00060	
1.193	28.640	.06000	.00860	-.00300	.00020	.00030	-.00060	.61530	442.90000	.00060	
	GRADIENT	-.01241	.00039	-.00041	-.00004	.00020	-.00011	-1.55827	.00000	.00006	



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.0500 IN.

ARC 11-747 0453A B C M F M V NOM. RN/L

(AEJ019) (12 MAR 74 )

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.000  
 ALLRON = .0000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .0000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 338/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-1.601	.19430	.00150	-0.00100	-0.00380	.00150	-0.00260	.80960	481.40000	.00040
.598	.120	.19370	.00250	-0.00190	-0.00380	.00130	-0.00250	.82710	481.40000	.00030
.598	1.143	.19250	.00230	-0.00100	-0.00370	.00220	-0.00290	.85740	481.40000	.00050
.598	1.646	.19300	.00120	-0.00100	-0.00590	.00190	-0.00270	.87490	481.40000	.00040
.597	3.535	.19120	.00240	-0.00120	-0.00520	.00240	-0.00290	.98950	481.40000	.00050
.597	5.582	.19050	.00280	-0.00130	-0.00480	.00170	-0.00270	1.32800	481.40000	.00040
.597	7.640	.19190	.00140	-0.00150	-0.00510	.00210	-0.00280	16.76000	481.40000	.00040
.599	9.624	.19120	.00290	-0.00180	-0.00510	.00250	-0.00100	-.09820	481.40000	.00060
.596	12.670	.19010	.00190	-0.00170	-0.00480	.00140	-0.00260	.36310	481.40000	.00040
.596	15.730	.18990	.00130	-0.00160	-0.00390	.00120	-0.00250	.46980	481.40000	.00030
.600	18.760	.19080	.00380	-0.00310	-0.00320	.00140	-0.00260	.51230	481.40000	.00040
.596	21.770	.19220	.00250	-0.00250	-0.00310	.00040	-0.00220	.53710	481.40000	.00020
.598	24.730	.20810	.00260	-0.00160	-0.00610	.00160	-0.00270	.54450	481.40000	.00050
.598	28.710	.25350	.00620	-0.00710	-0.00500	.00060	-0.00230	.52750	481.40000	.00020
GRADIENT		-.00070	.00009	-.00006	.00013	.00024	-.00008	.04224	.00000	.00003

RUN NO. 335/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.800	-1.701	.20490	.00300	-0.00150	-0.00400	.00160	-0.00260	.82440	641.30000	.00040
.802	.135	.20260	.00230	-0.00160	-0.00390	.00260	-0.00230	.84670	641.30000	.00030
.804	1.118	.19950	.00300	-0.00170	-0.00410	.00150	-0.00260	.88100	641.30000	.00040
.803	1.639	.19710	.00270	-0.00160	-0.00390	.00080	-0.00240	.90670	641.30000	.00030
.802	3.565	.19160	.00210	-0.00170	-0.00400	.00080	-0.00240	1.06700	641.30000	.00030
.801	5.618	.18700	.00120	-0.00180	-0.00400	.00150	-0.00260	1.97700	641.30000	.00040
.798	7.593	.18270	.00250	-0.00190	-0.00500	.00110	-0.00250	-.49990	641.30000	.00030
.802	9.587	.16710	.00040	-0.00160	-0.00410	.00180	-0.00270	.31570	641.30000	.00040
.801	12.620	.15530	.00140	-0.00250	-0.00220	.00190	-0.00270	.47960	641.30000	.00050
.800	15.690	.13800	-.00200	-0.00280	-0.00310	.00140	-0.00250	.54050	641.30000	.00040
.798	18.730	.14310	-.00250	-0.00380	-0.0020	.00220	-0.00280	.55670	641.30000	.00060
.798	21.750	.16520	-.00300	-0.00400	-0.00220	.00410	-0.00160	.55780	641.30000	.00120
.797	24.740	.21770	-.00590	-0.00420	-0.00130	.00540	-0.00210	.53950	641.30000	.00140
.804	28.760	.24430	.00500	-0.00460	-0.00140	.00280	-0.00150	.53300	641.30000	.00120
GRADIENT		-.00317	-.00015	-.00004	-.00000	-.00012	.00003	.05710	-.00000	-.00002

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NOM. RN/L

(AEJ019) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT.  
 LREF = 14.2445 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

BETA = .000  
 AILRON = .000  
 SPDRK = 25.000  
 ELEV-L = -20.000  
 ELEV-R = -20.000

## PARAMETRIC DATA

RUN NO. 332/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.903	-1.685	.22040	.00380	-.00190	-.00320	.00210	-.00100	.83970	617.90000	.00070
.902	.070	.21750	.00430	-.00170	-.00300	.00220	-.00100	.86020	617.90000	.00060
.902	1.103	.21220	.00330	-.00190	-.00310	.00160	-.00080	.90170	617.90000	.00050
.903	1.623	.20950	.00320	-.00180	-.00300	.00170	-.00080	.92330	617.90000	.00050
.905	3.552	.19430	.00340	-.00210	-.00350	.00320	-.00130	1.16400	617.90000	.00080
.904	5.523	.17450	.00410	-.00210	-.00350	.00180	-.00090	43.06000	617.90000	.00060
.903	7.612	.15190	.00340	-.00180	-.00370	.00110	-.00070	.24730	617.90000	.00050
.903	9.503	.13210	.00260	-.00260	-.00190	.00180	-.00080	.45790	617.90000	.00050
.897	12.820	.11500	.00160	-.00290	-.00230	.00230	-.00090	.53960	617.90000	.00060
.902	15.670	.10460	.00030	-.00330	-.00200	.00210	-.00090	.56940	617.90000	.00060
.902	18.740	.11500	.00110	-.00420	-.00180	.00220	-.00100	.57600	617.90000	.00070
.899	21.730	.14270	-.00160	-.00400	-.00100	.00380	-.00160	.57180	617.90000	.00110
.901	24.710	.20780	-.00050	-.00540	-.00120	.00580	-.00250	.54750	617.90000	.00170
.899	28.660	.23830	.00620	-.00360	-.00190	.00230	-.00140	.54250	617.90000	.00110
	GRADIENT	-.00614	-.00017	-.00006	-.00008	.00023	-.00006	.07646	.00000	.00002

RUN NO. 329/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.049	-1.663	.23420	.00310	-.00180	-.00310	.00120	-.00070	.86820	627.20000	.00050
1.049	.081	.22440	.00230	-.00170	-.00330	.00100	-.00060	.83360	627.20000	.00050
1.049	1.113	.20760	.00330	-.00160	-.00310	.00140	-.00070	.95640	627.20000	.00080
1.051	1.615	.19710	.00280	-.00150	-.00300	.00050	-.00040	1.11110	627.20000	.00040
1.053	3.554	.16280	.00410	-.00160	-.00280	.00190	-.00090	2.11000	627.20000	.00060
1.051	5.544	.14180	.00500	-.00260	-.00350	.00090	-.00060	.33430	627.20000	.00050
1.049	7.596	.12020	.00450	-.00280	-.00360	.00120	-.00070	.43070	627.20000	.00060
1.046	9.570	.10690	.00500	-.00310	-.00390	.00110	-.00060	.52000	627.20000	.00060
1.050	12.590	.09090	.00610	-.00280	-.00260	.00120	-.00060	.56940	627.20000	.00050
1.048	15.660	.07980	.00420	-.00370	-.00260	.00120	-.00050	.59090	627.20000	.00050
1.049	18.710	.07010	.00520	-.00310	-.00330	.00180	-.00110	.60330	627.20000	.00080
1.048	21.710	.05910	.00430	-.00420	-.00330	.00180	-.00080	.61190	627.20000	.00080
1.047	24.700	.09020	.00640	-.00300	-.00020	.00070	-.00070	.60360	627.20000	.00060
1.047	28.630	.13510	.00330	-.00140	-.00080	-.00020	-.00020	.59160	627.20000	.00040
	GRADIENT	-.00116	.00030	.00005	.00016	.00015	-.00004	.26426	-.00000	.00002



TABULATED SOURCE DATA - QAS3A

DATE 06 JUL 74

(AEJ019) (12 MAR 74)

ARC 11-747 QAS3A B C M F W L V NM, RN/L

PARAMETRIC DATA

BETA = 00 ELEVON = -20.000  
ALLRON = 0000 BDFLAP = -11.700  
SPBRK = 25.000 RODDER = 0.000  
ELEV-L = -20.000 ELEV-R = -20.000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = 0.0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = 0.0000 SCALE

RUN NO. 326/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.204	-636	.16940	.00330	-.00110	-.00230	.00090	-.00060	.87690	574.20000	.00060
1.205	.070	.15940	.00340	-.00100	-.00220	.00160	-.00080	.91350	574.20000	.00060
1.209	1.082	.14450	.00450	-.00150	-.00230	.00090	-.00090	1.00200	574.20000	.00050
1.210	1.587	.13790	.00500	-.00180	-.00240	.00160	-.00090	1.09300	574.20000	.00070
1.207	3.535	.11950	.00650	-.00280	-.00300	.00150	-.00100	-10.87000	574.20000	.00080
1.205	5.529	.09920	.00560	-.00260	-.00230	.00210	-.00110	.34080	574.20000	.00080
1.201	7.595	.08140	.00620	-.00270	-.00230	.00160	-.00110	.51250	574.20000	.00080
1.200	9.570	.06950	.00350	-.00230	-.00170	.00100	-.00080	.56280	574.20000	.00070
1.194	12.590	.05460	.00390	-.00240	-.00170	.00080	-.00060	.59610	574.20000	.00060
1.198	15.650	.03550	.00340	-.00160	-.00140	-.00010	-.00010	.61460	574.20000	.00030
1.198	18.710	.02400	.00300	-.00120	-.00020	-.00050	.00000	.62280	574.20000	.00020
1.196	21.700	.02670	-.00040	.00120	.00040	-.00020	.00000	.62310	574.20000	-.00020
1.195	24.660	.03160	-.00250	.00180	.00050	-.00030	.00000	.62260	574.20000	-.00050
1.196	28.650	.05750	.01070	-.00290	-.00050	.00040	-.00010	.61600	574.20000	.00060
	GRADIENT	-.01200	.00081	-.00044	-.00018	.00010	-.00009	-2.75673	-1.00000	.00005

ARC 11-747 0453A B C M F M V HIGH RN/L

(AEJ820) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0000 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.000  
 AILRON = .0000 BDFLAP = -11.700  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 337, 0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.597	-1.763	.19470	.00240	-.00120	-.02630	.00130	-.00050	.80810	781.80000	.00030
.598	.117	.19370	.00170	-.00120	-.02620	-.00020	.00000	.82710	781.80000	.00020
.598	1.146	.19300	.00190	-.00130	-.02630	.00180	-.00070	.85670	781.80000	.00040
.598	1.652	.19250	.00190	-.00120	-.02600	-.00010	-.00010	.87590	781.80000	.00020
.598	5.601	.19190	.00220	-.00130	-.02570	.00070	-.00040	.94980	781.80000	.00030
.597	5.607	.19120	.00210	-.00140	-.02550	.00190	-.00060	1.32600	781.80000	.00050
.598	7.649	.18930	.00240	-.00160	-.02520	.00130	-.00060	38.48000	781.80000	.00040
.597	9.633	.18990	.00270	-.00180	-.02470	.00120	-.00050	-.06930	781.80000	.00040
.595	12.640	.19190	.00250	-.00180	-.02460	.00170	-.00070	.35550	781.80000	.00040
.597	15.710	.19170	.00150	-.00170	-.02310	.00080	-.00040	.46690	781.80000	.00030
.597	18.760	.19340	.00200	-.00200	-.02370	.00140	-.00060	.50830	781.80000	.00040
.596	21.770	.19870	.00080	-.00170	-.02420	.00020	-.00010	.53150	781.80000	.00030
.597	24.760	.20760	-.00140	-.00210	-.02440	.00020	-.00010	.54440	781.80000	.00020
.599	28.740	.25640	-.00300	-.00300	-.02140	-.00070	-.00020	.52630	781.80000	.00010
	GRADIENT	-.00285	-.00220	-.00002	-.00014	-.00006	-.00001	.04181	.00000	.00000

RUN NO. 336, 0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.798	-1.739	.20480	.00290	-.00180	-.02420	.00150	-.00060	.82280	829.90000	.00040
.799	.139	.20220	.00270	-.00180	-.02420	.00100	-.00040	.84580	829.90000	.00030
.801	1.154	.19910	.00340	-.00190	-.02440	.00110	-.00050	.88020	829.90000	.00040
.802	1.634	.19660	.00330	-.00190	-.02430	-.00010	-.00010	.90310	829.90000	.00020
.800	5.611	.19190	.00280	-.00200	-.02430	.00120	-.00050	1.07600	829.90000	.00030
.798	5.576	.18610	.00250	-.00210	-.02390	.00090	-.00040	1.92600	829.90000	.00030
.798	7.624	.18290	.00320	-.00210	-.02470	.00150	-.00060	-.47810	829.90000	.00040
.798	9.604	.17170	.00070	-.00170	-.02410	.00150	-.00060	.29500	829.90000	.00040
.801	12.610	.16140	.00170	-.00220	-.02500	.00110	-.00040	.47130	829.90000	.00040
.799	15.700	.14800	-.00290	-.00230	-.02530	.00110	-.00040	.53260	829.90000	.00040
.800	18.730	.14540	-.00310	-.00340	-.02600	.00190	-.00070	.55590	829.90000	.00050
.799	21.770	.17030	-.00440	-.00380	-.02600	.00320	-.00130	.55500	829.90000	.00090
.799	24.770	.21950	-.00490	-.00480	-.02600	.00470	-.00190	.53850	829.90000	.00140
.798	28.690	.24830	-.00810	-.00670	-.02680	.00650	-.00290	.53010	829.90000	.00200
	GRADIENT	-.00302	.00001	-.00005	-.00003	-.00009	.00003	.05836	.00000	-.00002





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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V HIGH RN/L

(AEJ020) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ-FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 331/0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.904	-7.09	.22090	.00490	-.00220	-.00330	.00150	-.00080	.83930	791.60000	.00060
.906	.091	.21730	.00450	-.00220	-.00310	.00100	-.00060	.86230	791.60000	.00050
.906	1.097	.21150	.00460	-.00220	-.00300	.00110	-.00070	.90380	791.60000	.00060
.906	1.621	.20880	.00470	-.00220	-.00310	.00100	-.00060	.93280	791.60000	.00050
.906	3.567	.19610	.00470	-.00240	-.00330	.00160	-.00080	1.16700	791.60000	.00060
.905	5.529	.17500	.00470	-.00220	-.00350	.00280	-.00050	19.08000	791.60000	.00050
.903	7.609	.15070	.00340	-.00210	-.00340	.00120	-.00060	.24680	791.60000	.00050
.906	9.581	.13380	.00270	-.00250	-.00330	.00080	-.00050	.45380	791.60000	.00040
.904	12.610	.11740	.00500	-.00400	-.00160	.00140	-.00070	.53790	791.60000	.00070
.906	15.690	.10590	.00210	-.00350	-.00220	.00200	-.00090	.56860	791.60000	.00060
.902	18.710	.11660	.00280	-.00390	-.00290	.00200	-.00120	.57200	791.60000	.00070
.904	21.740	.14070	.00240	-.00310	-.00390	.00300	-.00200	.54710	791.60000	.00150
.904	24.730	.20770	.00380	-.00360	-.00200	.00480	-.00280	.54450	791.60000	.00080
.900	28.650	.23510	.00620	-.00280	-.00190	.00110	-.00080	.07674	.00000	.00001
	GRADIENT	-.00594	-.00001	-.00005	-.00001	.00005	-.00001			

RUN NO. 330/0 RN/L = 4.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.053	-6.53	.23280	.00480	-.00220	-.00380	.00140	-.00080	.87040	809.90000	.00060
1.052	.078	.22350	.00360	-.00210	-.00390	.00120	-.00070	.89630	809.90000	.00050
1.052	1.108	.20340	.00370	-.00190	-.00390	.00140	-.00080	.95890	809.90000	.00060
1.051	1.625	.19660	.00340	-.00210	-.00410	.00080	-.00050	1.00800	809.90000	.00040
1.050	3.556	.16390	.00500	-.00220	-.00330	.00160	-.00080	1.96600	809.90000	.00060
1.051	5.549	.14210	.00610	-.00310	-.00420	.00210	-.00100	.03480	809.90000	.00070
1.050	.90	.12240	.00530	-.00310	-.00430	.00220	-.00110	.42740	809.90000	.00080
1.050	9.573	.10580	.00430	-.00280	-.00330	.00070	-.00050	.52040	809.90000	.00050
1.049	12.590	.09210	.00740	-.00380	-.00280	.00130	-.00080	.56840	809.90000	.00070
1.050	15.660	.07920	.00510	-.00310	-.00350	.00140	-.00100	.59130	809.90000	.00070
1.052	18.720	.06690	.00770	-.00380	-.00270	.00140	-.00110	.60480	809.90000	.00070
1.052	21.720	.06000	.00610	-.00270	-.00310	.00080	-.00060	.61150	809.90000	.00050
1.048	24.730	.09750	.00780	-.00290	-.00260	.00090	-.00070	.60350	809.90000	.00060
1.048	28.680	.13350	.00300	-.00110	-.00070	-.00050	-.00010	.59230	809.90000	.00030
	GRADIENT	-.01660	.00011	-.00000	.00011	.00004	.00000	.25724	.00000	.00000

## TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C H F M V HIGH RN/L (AEJ525) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0007 ELEVON = -20.0000  
 AILERON = .0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RODDER = .0000  
 ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 325/0 RN/L = 4.26 GRADIENT INTERVAL = -5.000/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
1.200	-1.667	.17580	.00380	-.00170	-.00310	.00190	-.00100	.87580	815.60000	.00070
1.203	.040	.16500	.00310	-.00160	-.00290	.00110	-.00070	.90860	815.60000	.00060
1.205	1.081	.14830	.00460	-.00210	-.00290	.00200	-.00100	.99860	815.60000	.00070
1.204	1.592	.14200	.00470	-.00250	-.00340	.00240	-.00120	1.07700	815.60000	.00080
1.206	3.544	.12000	.00730	-.00340	-.00340	.00280	-.00150	-22.79000	815.60000	.00100
1.200	5.531	.10170	.00570	-.00330	-.00310	.00220	-.00130	.32350	815.60000	.00100
1.199	7.523	.08110	.00650	-.00330	-.00300	.00240	-.00150	.51340	815.60000	.00100
1.198	9.584	.06920	.00630	-.00300	-.00230	.00130	-.00100	.56360	815.60000	.00070
1.198	12.590	.05180	.00630	-.00280	-.00190	.00130	-.00090	.59800	815.60000	.00060
1.200	15.650	.03680	.00480	-.00220	-.00180	.00030	-.00030	.61390	815.60000	.00030
1.198	18.670	.02620	.00450	-.00150	-.00070	-.00090	.00020	.62180	815.60000	.00010
1.191	21.680	.02790	.00090	.00110	.00030	-.00190	.00080	.62260	815.60000	-.00020
1.199	24.670	.03170	.00000	.00120	.00030	-.00320	.00130	.62250	815.60000	-.00050
1.196	28.620	.05790	.01020	-.00300	-.00100	.00060	-.00060	.61590	815.60000	.00070
	GRADIENT	-.01326	.00092	-.00044	-.00010	.00001	-.00016	-5.48376	.00000	.00008



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V N3M, RN/L

(AEJ021) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1904 IN.  
 SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 ALLRON = 10.000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

RUN NO. 124/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.600	-.697	.12100	-.01450	.00910	.02480	-.00390	.00150	.80940	480.90000	-.00090
.598	-.378	.12100	-.01630	.00930	.02490	-.00410	.00150	.85450	480.90000	-.00090
.600	1.345	.12110	-.01620	.00940	.02470	-.00460	.00170	.92140	480.90000	-.00100
.601	1.841	.12010	-.01630	.00930	.02470	-.00460	.00170	.97110	480.90000	-.00110
.599	3.794	.12040	-.01740	.00930	.02510	-.00510	.00190	1.77500	480.90000	-.00110
.598	5.809	.12010	-.01740	.00930	.02560	-.00470	.00180	-.12380	480.90000	-.00100
.598	7.858	.11920	-.02010	.00930	.02590	-.00470	.00180	.36010	480.90000	-.00120
.599	9.840	.11760	-.02090	.00930	.02610	-.00520	.00200	.46970	480.90000	-.00130
.600	12.890	.11570	-.02260	.00910	.02700	-.00590	.00230	.53450	480.90000	-.00140
.599	15.960	.11210	-.02070	.00750	.02530	-.00590	.00230	.56290	480.90000	-.00150
.597	19.000	.11120	-.01860	.00680	.02560	-.00570	.00230	.57800	480.90000	-.00140
.598	22.030	.11210	-.01670	.00700	.02660	-.00630	.00260	.58730	480.90000	-.00160
.597	25.070	.11550	-.01230	.00630	.02440	-.00580	.00240	.58350	480.90000	-.00150
.597	28.960	.11920	-.01650	-.00130	.02130	-.00480	.00230	.55880	480.90000	-.00000
	GRADIENT	-.00017	-.00056	.00004	.00005	-.00028	.00010	.21307	.00000	-.00005

RUN NO. 123/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.797	-.715	.13290	-.01930	.01150	.02360	-.00510	.00190	.82520	639.70000	-.00120
.798	.398	.12980	-.01990	.01120	.02320	-.00460	.00170	.87730	639.70000	-.00110
.798	1.419	.12860	-.02040	.01100	.02280	-.00460	.00170	.96230	639.70000	-.00110
.798	1.921	.12690	-.02010	.01090	.02240	-.00470	.00180	1.03100	639.70000	-.00110
.798	3.900	.12510	-.01950	.01060	.02250	-.00430	.00160	4.13400	639.70000	-.00100
.793	5.881	.12280	-.02020	.01020	.02250	-.00550	.00180	.42800	639.70000	-.00130
.797	7.927	.11670	-.02090	.00920	.02070	-.00480	.00160	.51390	639.70000	-.00120
.797	9.909	.10590	-.02090	.00800	.01740	-.00440	.00160	.55330	639.70000	-.00070
.797	12.950	.10290	-.02120	.00730	.01260	-.00290	.00110	.57860	639.70000	-.00050
.799	16.000	.09310	-.01870	.00530	.01110	-.00220	.00090	.58710	639.70000	-.00040
.796	19.000	.09700	-.01770	.00370	.01350	-.00160	.00080	.58150	639.70000	-.00030
.797	22.160	.12470	-.01330	.00320	.01700	-.00200	.00090	.55950	639.70000	-.00190
.796	25.270	.18340	-.00730	-.00260	.01100	.00500	-.00220	-.00240	639.70000	-.00180
.797	29.290	.20210	-.02460	-.00480	.01420	.00510	-.00240	.55810	639.70000	-.00004
	GRADIENT	-.00162	-.00003	-.00019	-.00025	.00015	-.00005	.69908	.00000	

ARC 11-747 QASSA B C M F M V NOM. RN/L

(AEJ021) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

BETA = .0000 ELEVON = -11.000  
 AILRON = .00000 BDFLAP = -11.700  
 SPDBRK = 25.0000 RODER = .0000  
 ELEV-L = .0000 ELEV-R = -20.0000

## PARAMETRIC DATA

RUN NO. 122/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.901	-7.05	.15130	-.03090	.01590	.02690	-.00740	.00280	.84830	615.50000	-.00180
.902	.394	.14620	-.02990	.01530	.02690	-.00730	.00270	.90790	615.50000	-.00170
.903	1.433	.14020	-.02940	.01490	.02700	-.00740	.00270	1.02000	615.50000	-.00170
.904	1.932	.13850	-.02730	.01450	.02650	-.00680	.00250	1.11100	615.50000	-.00160
.905	3.876	.12540	-.02880	.01320	.02400	-.00670	.00240	-2.17100	615.50000	-.00150
.897	5.851	.11490	-.02710	.01170	.01860	-.00450	.00210	.30340	615.50000	-.00140
.898	7.887	.09640	-.02680	.01060	.01560	-.00430	.00170	.49460	615.50000	-.00110
.900	9.854	.08610	-.02490	.01070	.01260	-.00370	.00140	.54720	615.50000	-.00090
.897	12.860	.07660	-.02230	.00990	.01020	-.00250	.00100	.57650	615.50000	-.00050
.898	15.320	.06510	-.01550	.00720	.01200	-.00260	.00100	.59730	615.50000	-.00050
.898	19.000	.07310	-.00840	.00280	.01370	-.00120	.00040	.59980	615.50000	-.00010
.899	22.110	.10790	-.00180	.00120	.01390	-.00030	-.00040	.58940	615.50000	.00040
.897	25.220	.17030	.00320	-.00700	.00640	.01000	-.00480	.56720	615.50000	.00370
.901	29.250	.1867	.00320	-.00590	.01200	.00740	-.00350	.55900	615.50000	.00260
GRADIENT		-.00565	.00037	-.00059	-.00063	.00017	-.00009	-.62610	-.00000	.00076

RUN NO. 121/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
1.050	-.684	.14570	-.04110	.02300	.02790	-.01370	.00590	.88050	627.30000	-.00360
1.052	.364	.13190	-.04260	.02260	.02690	-.01420	.00610	.97080	627.30000	-.00370
1.051	1.403	.11560	-.04270	.02240	.02570	-.01320	.00580	1.25700	627.30000	-.00360
1.050	1.871	.10880	-.04290	.02240	.02540	-.01340	.00590	1.75900	627.30000	-.00360
1.051	3.784	.06590	-.04310	.02150	.02370	-.01220	.00550	.29840	627.30000	-.00320
1.049	5.742	.06650	-.04220	.02080	.02210	-.01180	.00500	.52010	627.30000	-.00310
1.046	7.765	.05060	-.04190	.01980	.01960	-.01050	.00450	.57750	627.30000	-.00310
1.047	9.748	.04070	-.03720	.01870	.01770	-.00990	.00430	.56980	627.30000	-.00300
1.045	12.780	.02770	-.02250	.01350	.01630	-.00770	.00380	.61650	627.30000	-.00220
1.046	15.830	.01670	-.01350	.01030	.01820	-.00540	.00290	.62010	627.30000	-.00150
1.045	18.870	.00670	-.01070	.00860	.02010	-.00480	.00230	.63020	627.30000	-.00120
1.050	21.900	.00350	-.00970	.00690	.01860	-.00450	.00200	.63180	627.30000	-.00140
1.048	24.970	.03460	-.00430	.00340	.01710	-.00610	.00300	.62730	627.30000	-.00160
1.048	29.050	.08510	.03130	-.00500	.00970	-.00120	.00040	.60840	627.30000	.00060
GRADIENT		-.01354	-.00039	-.00032	-.00094	.00038	-.00010	-.69076	-.00000	.00007



DATE 06 JUL 74

TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F M V NOM. RN/L

(AEJ021) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .000 ELEVON = -10.000  
 AILRON = 10.000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

PARAMETRIC DATA

RUN NO. 120/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	q	CBLV
1.199	-6.77	.11160	-.03050	.01840	.02020	-.00750	.00370	.88820	566.90000	-.00210
1.201	.263	.09860	-.03110	.01790	.01970	-.00700	.00350	.98400	566.90000	-.00200
1.199	1.271	.08520	-.03050	.01760	.01940	-.00660	.00340	1.42300	566.90000	-.00200
1.198	1.775	.07920	-.02980	.01740	.01950	-.00620	.00320	4.97600	566.90000	-.00180
1.199	3.673	.05730	-.02890	.01650	.01960	-.00610	.00300	.43840	566.90000	-.00170
1.194	5.653	.03870	-.02820	.01560	.01960	-.00490	.00250	.57010	566.90000	-.00130
1.198	7.701	.02160	-.02520	.01430	.01910	-.00420	.00200	.60970	566.90000	-.00090
1.196	9.670	.01410	-.02200	.01290	.01770	-.00330	.00160	.62130	566.90000	-.00070
1.196	12.700	-.00230	-.01250	.00940	.01700	-.00100	.00030	.63290	566.90000	-.00010
1.197	15.730	-.01550	-.00640	.00620	.01710	-.00190	.00070	.63990	566.90000	-.00010
1.196	18.760	-.02540	-.00210	.00360	.01770	-.00150	.00030	.64250	566.90000	-.00010
1.196	21.810	-.01980	.00170	.00240	.01700	-.00290	.00130	.63340	566.90000	-.00050
1.197	24.810	-.01430	.00440	.00140	.01680	-.00330	.00150	.63710	566.90000	-.00070
1.198	28.840	.01090	.01640	-.00270	.01210	-.00270	.00000	.62970	566.90000	-.00030
	GRADIENT	-.01245	.00044	-.00043	-.00012	.00033	-.00016	.00549	.00000	.00000

ARC 11-747 QAS3A B C M F M V NOM. RN/L

(REJ022) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. ZMRP = 32.3010 IN.  
 LRFP = 14.2440 IN. YMRP = .0000 IN.  
 BRFP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AIRLON = 20.000 BDFLAP = -11.700  
 SPCBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -40.000

RUN NO. 134/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLFWO	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.597	-7.726	.14040	-.03850	.01950	.03570	-.00860	.00340	.79520	475.90000	-.00230
.601	.314	.13990	-.03860	.01940	.03570	-.00950	.00380	.82450	475.90000	-.00250
.605	1.338	.13760	-.03900	.01920	.03570	-.00890	.00360	.86390	475.90000	-.00240
.598	1.838	.13720	-.03810	.01910	.03570	-.00950	.00370	.89230	475.90000	-.00250
.597	3.779	.13550	-.03980	.01910	.03560	-.00840	.00370	1.14000	475.90000	-.00240
.598	5.815	.13420	-.04120	.01920	.03630	-.00870	.00390	-49.86000	475.90000	-.00250
.598	7.857	.13360	-.04440	.01970	.03700	-.01080	.00430	.14010	475.90000	-.00280
.600	9.842	.13260	-.04680	.01960	.03790	-.01100	.00430	.39820	475.90000	-.00280
.600	12.890	.12870	-.04670	.01850	.03680	-.01030	.00410	.51860	475.90000	-.00260
.597	15.950	.11890	-.03940	.01400	.03190	-.00910	.00370	.55370	475.90000	-.00240
.596	19.010	.11590	-.03560	.01190	.02780	-.00750	.00310	.57370	475.90000	-.00200
.600	22.020	.11240	-.02840	.00950	.02690	-.00710	.00290	.58630	475.90000	-.00190
.596	25.020	.12920	-.02330	.00870	.02260	-.00640	.00260	.58330	475.90000	-.00160
.597	28.950	.10050	-.00390	.00100	.01700	-.00220	.00100	.56620	475.90000	-.00050
	GRADIENT	-.00120	-.02025	-.00010	-.00002	-.00014	.00004	.07610	.00000	-.00001

RUN NO. 133/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLFWO	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.790	-7.742	.15470	-.04840	.02340	.03490	-.01190	.00470	.80770	640.20000	-.00310
.798	.412	.15250	-.04880	.02320	.03490	-.01220	.00480	.84190	640.20000	-.00320
.798	1.436	.14980	-.04780	.02280	.03480	-.01190	.00470	.89120	640.20000	-.00330
.799	1.926	.14830	-.04760	.02280	.03460	-.01180	.00450	.92510	640.20000	-.00300
.798	3.887	.14370	-.04760	.02210	.03430	-.01140	.00450	1.28400	640.20000	-.00290
.799	5.898	.14150	-.05040	.02230	.03520	-.01150	.00460	-1.51400	640.20000	-.00310
.798	7.948	.13940	-.05140	.02140	.03590	-.01190	.00460	.02420	640.20000	-.00320
.797	9.935	.12770	-.05060	.01930	.03300	-.01120	.00460	.45130	640.20000	-.00350
.796	12.960	.11940	-.04970	.01680	.03160	-.00970	.00390	.52360	640.20000	-.00250
.796	16.010	.10630	-.04410	.01360	.01560	-.00590	.00250	.56770	640.20000	-.00160
.793	19.070	.10140	-.03570	.00960	.01350	-.00340	.00150	.58430	640.20000	-.00080
.797	22.140	.11250	-.02510	.00550	.01140	-.00190	.00080	.58720	640.20000	-.00030
.796	25.240	.16850	-.00570	.00060	.00730	-.00060	.00030	.56660	640.20000	-.00001
.798	29.190	.10400	.00820	-.00430	.00370	.00290	-.00140	.56570	640.20000	.00040
	GRADIENT	-.00242	.00024	-.00028	-.00014	.00014	-.00006	.10212	.00000	.00005



TABULATED SOURCE DATA - 0453A

DATE 06 JUL 74

UASJ022) ( 12 MAR 74 )

ARC 11-747 0453A B C M F W V NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SJ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = 10000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = 20.000 BDFAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -40.000

RUN NO. 132/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CT	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
.901	-7.46	.16490	-.06370	.02920	.03610	-.01600	.02630	.82310	615.00000	-.00410
.902	.413	.15850	-.06250	.02870	.03640	-.01650	.02640	.86530	615.00000	-.00420
.903	1.425	.15370	-.06120	.02790	.03670	-.01530	.02600	.92250	615.00000	-.00400
.904	1.923	.15110	-.06110	.02770	.03690	-.01550	.02600	.97010	615.00000	-.00400
.905	3.082	.14190	-.06000	.02590	.03710	-.01540	.02620	1.66200	615.00000	-.00390
.906	5.876	.13440	-.06110	.02530	.03430	-.01550	.02610	-1.8950	615.00000	-.00400
.907	7.887	.11660	-.06300	.02390	.02990	-.01460	.02590	.40850	615.00000	-.00380
.908	9.861	.11220	-.06010	.02170	.02340	-.01290	.02500	.51300	615.00000	-.00330
.909	12.870	.06990	-.05960	.02160	.01710	-.01000	.02410	.56420	615.00000	-.0026 0
.910	15.930	.07200	-.04560	.01700	.01310	-.00680	.02270	.59260	615.00000	-.00170
.911	19.070	.07330	-.02820	.00840	.01030	-.00320	.02120	.59980	615.00000	-.00070
.912	22.070	.09560	-.01940	.00460	.00930	-.00070	.02010	.59490	615.00000	.00000
.913	25.230	.16070	-.00140	-.00140	.00410	.00530	-.00270	.57140	615.00000	.00230
.914	29.170	.17070	.01360	-.00270	.00910	.00760	-.00090	.57480	615.00000	.00110
.915	GRADIENT	-.02495	.02280	-.00272	.00022	.00019	-.00009	.17846	-.00000	.00005

RUN NO. 131/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CT	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
1.050	-7.01	.16370	-.06860	.03740	.03830	-.02280	.00970	.84110	627.00000	-.00630
1.051	.391	.15400	-.06790	.03700	.03850	-.02320	.00990	.88980	627.00000	-.00640
1.052	1.410	.14490	-.07010	.03720	.03920	-.02370	.01010	.97520	627.00000	-.00650
1.053	1.920	.14050	-.07030	.03710	.03980	-.02370	.01010	1.05400	627.00000	-.00650
1.054	3.821	.12310	-.07210	.03640	.03970	-.02420	.01030	-34.60000	627.00000	-.00660
1.049	5.785	.10370	-.07790	.03650	.03620	-.02460	.01040	.34460	627.00000	-.00670
1.050	7.817	.08360	-.07570	.03400	.03180	-.02370	.01010	.51650	627.00000	-.00650
1.049	9.778	.06740	-.07260	.03200	.02780	-.02270	.00970	.56970	627.00000	-.00620
1.052	12.790	.05090	-.05810	.02710	.02540	-.02180	.00800	.60010	627.00000	-.00510
1.051	15.860	.03630	-.05270	.02590	.02390	-.02160	.00750	.61510	627.00000	-.00480
1.050	18.870	.01650	-.04200	.02120	.02260	-.01430	.00720	.62630	627.00000	-.00440
1.051	21.890	.01400	-.03170	.01800	.02040	-.01480	.00790	.62810	627.00000	-.00470
1.051	24.960	.04040	-.01480	.01010	.01910	-.01020	.00490	.62030	627.00000	-.00290
1.053	29.050	.08850	.02180	-.00040	.01130	-.00230	.00090	.60710	627.00000	.00000
1.051	GRADIENT	-.00898	.02089	-.00019	.00035	-.00031	.00013	-7.54087	-.00001	-.00007

ARC 11-747 QAS3A B C H F W V NOM. RN/L

(AEJ522) (12 MAR 74)

## REFERENCE DATA

SCRF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BRFF = 28.1004 IN.  
 SCALE = .0300 SCALE

XNPF = 32.3010 IN.  
 YNPF = .0000 IN.  
 ZNPF = 11.2500 IN.

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.000  
 ALLRON = 20.0000 EDFLAP = -11.700  
 SPDRK = 25.0000 RUDER = .000  
 ELEV-L = .0000 ELEV-R = -4.000

RUN NO. 130/0 RN/L = 2.99 GRADIENT INTERVAL = -5.007 5.00

MACH	ALPHA	CLMFLD	CT	CYN	GBL	CTV	CYNY	XCF/L	W	GBLY
1.203	-7.704	.13630	-.05190	.03050	.03410	-.01840	.00820	-.84910	573.80000	-.00530
1.201	3.302	.12220	-.05150	.02950	.03350	-.01820	.00810	-.90110	573.80000	-.00520
1.199	1.301	.10800	-.05300	.02910	.03290	-.01740	.00790	1.01900	573.80000	-.00510
1.198	1.319	.10800	-.05280	.03330	.03270	-.01930	.00870	1.15100	573.80000	-.00560
1.200	3.733	.08770	-.06510	.03360	.03130	-.01990	.00890	-.11290	573.80000	-.00570
1.198	5.654	.06700	-.06460	.03120	.03020	-.02030	.00890	.48260	573.80000	-.00560
1.196	7.714	.04830	-.06370	.03020	.02800	-.01870	.00830	.57110	573.80000	-.00520
1.198	9.702	.03580	-.05970	.02850	.02530	-.01690	.00790	.60020	573.80000	-.00490
1.197	12.720	.01910	-.05200	.02620	.02360	-.01450	.00700	.62170	573.80000	-.00450
1.198	15.760	.00170	-.03950	.02180	.02210	-.01190	.00600	.63190	573.80000	-.00370
1.198	18.770	-.00360	-.02610	.01460	.02110	-.00800	.00420	.63810	573.80000	-.00240
1.196	21.820	-.00880	-.01130	.00920	.02090	-.00640	.00340	.63590	573.80000	-.00200
1.198	24.830	-.00460	-.00560	.00670	.01950	-.00650	.00330	.63410	573.80000	-.00230
1.197	28.890	.02150	-.00270	.00700	.01530	-.00980	.00400	.62870	573.80000	-.00270
		-.01072	-.00340	.00090	-.00063	-.00040	.00018	-.19999	-.00000	-.00111
	GRADIENT									





ARC 11-747 QASSA B C M F W V NOM. RN/L

(AEJ523) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0390 SCALE

RMF = 32.3010 IN.  
YMF = .0000 IN.  
ZMF = 11.2500 IN.

BETA = .0000 ELEVON = -40.000  
AILRON = .0000 BOFLAP = -11.700  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = -40.0000 ELEV-R = -40.0000

PARAMETRIC DATA

RUN NO. 129/0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.596	-.048	.22760	.00330	-.00070	-.00120	.00110	-.00030	.81620	475.40000	.00040
.598	.380	.22760	.00430	-.00060	-.00120	.00130	-.00050	.81320	475.40000	.00040
.599	1.407	.22320	.00400	-.00090	-.00110	.00100	-.00030	.83330	475.40000	.00030
.600	1.912	.22130	.00470	-.00090	-.00090	.00160	-.00070	.84740	475.40000	.00050
.602	3.465	.21610	.00620	-.00120	-.00130	.00110	-.00030	.91750	475.40000	.00040
.598	5.871	.21510	.00470	-.00140	-.00140	.00120	-.00050	1.06800	475.40000	.00040
.598	7.920	.21800	.00470	-.00150	-.00180	.00050	-.00030	1.55700	475.40000	.00030
.598	9.924	.21340	.00410	-.00180	-.00210	.00040	-.00030	-4.77900	475.40000	.00030
.600	12.970	.21320	.00410	-.00200	-.00220	.00040	-.00040	.20320	475.40000	.00030
.596	16.040	.20750	.00540	-.00260	-.00230	.00160	-.00070	.42770	475.40000	.00050
.598	19.080	.20490	.00670	-.00300	-.00150	.00070	-.00040	.49440	475.40000	.00030
.599	22.110	.19490	.00640	-.00270	-.00180	.00070	-.00070	.53400	475.40000	.00050
.597	25.090	.20140	.00310	-.00230	-.00140	.00140	-.00080	.54760	475.40000	.00040
.601	29.030	.22750	.00640	-.00080	-.00120	.00260	-.00030	.54140	475.40000	.00050
	GRADIENT	-.00304	.00066	-.00014	-.00001	-.00000	-.00001	.02857	.00001	.00001

RUN NO. 128/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.797	-.089	.23890	.00480	-.00080	-.00010	.00110	-.00060	.81670	637.70000	.00040
.800	.539	.23640	.00450	-.00080	.00020	.00160	-.00070	.82880	637.70000	.00050
.798	1.559	.23210	.00510	-.00090	.00010	.00090	-.00050	.85240	637.70000	.00040
.798	2.050	.22970	.00480	-.00090	.00010	.00140	-.00070	.86760	637.70000	.00040
.799	3.991	.22170	.00530	-.00140	-.00040	.00170	-.00080	.95360	637.70000	.00050
.798	6.022	.22180	.00460	-.00170	-.00090	.00140	-.00070	1.16600	637.70000	.00040
.799	8.056	.22390	.00370	-.00210	-.00080	.00150	-.00070	2.24300	637.70000	.00040
.800	10.090	.21180	.00350	-.00210	-.00130	.00130	-.00070	-.29720	637.70000	.00040
.798	13.050	.19000	.00290	-.00230	-.00060	.00160	-.00070	.38490	637.70000	.00050
.799	16.100	.17110	-.00090	-.00280	.00000	.00100	-.00040	.50640	637.70000	.00030
.797	19.120	.15990	-.00420	-.00400	-.00050	.00200	-.00080	.54660	637.70000	.00060
.799	22.160	.16190	-.00050	-.00480	-.00150	.00430	-.00170	.56160	637.70000	.00120
.800	25.250	.20630	.00320	-.00530	-.00230	.00680	-.00290	.54670	637.70000	.00210
.800	29.270	.21780	.00970	-.00600	.00010	.00520	-.00230	.54950	637.70000	.00170
	GRADIENT	-.00424	.00015	-.00015	-.00000	.00010	-.00004	.03370	.00000	.00001



TABULATED SOURCE DATA - OM53A

DATE 06 JUL 74

(AEJ023) (12 MAR 74)

ARC 11-747 OM53A B C M F W V NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
YMRP = .0000 IN.  
ZMRP = 11.2500 IN.

PARAMETRIC DATA

BETA = .000 ELEVON = -40.000  
AILRON = .000 BOFLAP = -11.700  
SPDRK = 25.000 RUDDER = .000  
ELEV-L = -40.000 ELEV-R = -40.000

RUN NO. 125/0 RN/L = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF12	CY	CYN	CBL	CVV	CYVW	XCP/L	Q	CBLV
1.200	-0.771	.22580	.00380	-.00140	-.00070	.00150	-.00070	.83590	576.60000	.00050
1.202	.379	.20930	.00560	-.00160	-.00090	.00170	-.00080	.86540	576.60000	.00050
1.202	1.406	.20080	.01450	-.00550	-.00210	.00270	-.00120	.90830	576.60000	.00080
1.203	1.904	.19540	.01550	-.00440	-.00150	.00330	-.00140	.94370	576.60000	.00090
1.202	3.834	.18230	.00150	-.00110	-.00170	.00130	-.00070	1.23600	576.60000	.00040
1.200	5.803	.15950	.00160	-.00120	-.00180	.00080	-.00050	-3.02700	576.60000	.00030
1.200	7.820	.13570	.00220	-.00110	-.00200	.00100	-.00050	.30180	576.60000	.00040
1.195	9.787	.11600	.00180	-.00110	-.00140	.00060	-.00040	.48250	576.60000	.00030
1.195	12.800	.09480	.00230	-.00110	-.00090	.00080	-.00040	.55880	576.60000	.00040
1.195	15.810	.07320	-.00040	-.00090	-.00010	-.00010	.00020	.59180	576.60000	.00010
1.195	18.830	.05100	.00160	.00110	-.00020	-.00040	.00030	.61040	576.60000	.00010
1.195	21.850	.02700	.00410	.00030	.00080	-.00100	.00050	.61290	576.60000	.00000
1.197	24.880	.06120	.00730	-.00200	.00050	-.00040	-.00030	.61230	576.60000	.00050
1.195	28.870	.08210	.00960	-.00180	.00000	-.00090	.00020	.60840	576.60000	.00020
GRADIENT		-.00925	-.00026	-.00008	-.00024	.00003	-.00003	.08629	.00001	-.00000

ARC 11-747 Q433A B C H F W V NOM. RN/L

(AEJ024) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

XMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILERON = .000 BOFLAP = -11.700  
 SPDGRN = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-H = .000

RUN NO. 181 / 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-1.648	.07730	.00240	-.00010	-.00210	-.00030	.00000	.85300	481.40000	.00020
.598	-.236	.07730	.00060	-.00000	-.00110	-.00110	.00020	.90170	481.40000	.00000
.601	3.241	.07690	.00270	-.00050	-.00240	-.00030	-.00010	.11720	481.40000	.00020
.600	6.296	.07510	.00200	-.00070	-.00280	-.00020	-.00010	.50060	481.40000	.00020
.598	9.315	.07010	.00300	-.00100	-.00340	-.00010	-.00020	.56330	481.40000	.00030
.598	12.350	.06690	.00040	.00010	-.00390	-.00010	-.00020	.58710	481.40000	.00030
.599	15.390	.05990	.00300	-.00100	-.00130	-.00080	.00010	.60110	481.40000	.00020
.597	18.460	.05220	.00540	-.00170	-.00220	-.00120	.00030	.61050	481.40000	.00010
.597	21.440	.04690	.00470	-.00130	-.00170	-.00090	.00020	.61630	481.40000	.00010
.599	24.480	.07220	.00110	.00050	-.00360	-.00070	.00010	.60930	481.40000	.00020
.598	28.980	.15880	.01150	-.00650	.00000	.00160	-.00090	.57790	481.40000	.00070
	GRADIENT	-.00005	.00024	-.00012	-.00009	.00007	-.00004	-.20372	.00000	.00002

RUN NO. 177 / 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.797	-1.638	.08990	.00230	-.00020	-.00210	-.00010	-.00010	.86550	640.70000	.00020
.802	.295	.08930	.00180	-.00040	-.00200	-.00040	.00000	.97460	640.70000	.00010
.804	3.303	.08730	.00220	-.00070	-.00260	-.00040	-.00030	.10110	640.70000	.00030
.797	6.319	.08020	.00180	-.00050	-.00310	-.00010	-.00010	.50340	640.70000	.00020
.794	9.331	.07190	-.00040	-.00070	-.00180	.00010	-.00020	.56520	640.70000	.00020
.799	12.360	.07110	-.00030	-.00150	-.00160	.00080	-.00030	.58300	640.70000	.00030
.799	15.460	.06130	-.00030	-.00240	-.00230	.00120	-.00050	.59970	640.70000	.00040
.796	18.490	.05990	-.00190	-.00260	-.00290	.00140	-.00050	.60660	640.70000	.00060
.796	21.570	.07810	-.00350	-.00350	-.00150	.00240	-.00090	.60290	640.70000	.00020
.799	24.710	.13450	.00430	-.00480	-.00570	.00030	-.00250	.53400	640.70000	.00180
.794	29.330	.16530	.01680	-.00650	-.00270	.00360	-.00180	.57660	640.70000	.00350
	GRADIENT	-.00066	.00001	-.00012	-.00014	.00016	-.00006	-.21763	.00000	.00004



PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 ALLRON = .000 BOFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

RUN NO. 173/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CY	CYN	CBL	CVN	CYL	CYN	XCP/L	Q	CBLV
.903	-.634	.09800	.00300	-.00090	-.00230	.00040	.00040	-.00030	.89920	616.80000	.00030
.904	.288	.09380	.00320	-.00100	-.00250	.00030	.00030	-.00030	1.06100	616.80000	.00020
.901	3.296	.08330	.00240	-.00100	-.00270	.00030	.00030	-.00040	.29440	616.80000	.00030
.899	6.268	.07700	.00190	-.00100	-.00330	.00030	.00030	-.00030	.51680	616.80000	.00030
.904	9.294	.06340	.00020	-.00140	-.00150	.00100	.00100	-.00040	.57540	616.80000	.00030
.897	12.320	.05610	.00160	-.00140	-.00170	.00170	.00170	-.00060	.59510	616.80000	.00030
.899	15.370	.04290	.00000	-.00180	-.00130	.00110	.00110	-.00050	.61080	616.80000	.00040
.898	18.470	.04780	-.00060	-.00190	-.00070	.00200	.00200	-.00080	.61230	616.80000	.00060
.902	21.540	.06830	-.00110	-.00220	-.00060	.00220	.00220	-.00110	.60680	616.80000	.00080
.900	24.700	.13300	.00970	-.00410	-.00520	.00640	.00640	-.00270	.58480	616.80000	.00210
.898	29.280	.15030	.01210	-.00290	-.00080	.00170	.00170	-.00110	.58510	616.80000	.00080
	GRADIENT	-.00367	-.00018	-.00002	-.00009	.00004	.00004	-.00003	-.17789	.00000	.00001

RUN NO. 169/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CY	CYN	CBL	CVN	CYL	CYN	XCP/L	Q	CBLV
1.032	-.615	.08650	.00190	-.00030	-.00260	-.00010	-.00010	-.00020	.98970	627.40000	.00020
1.050	.225	.07780	.00030	-.00010	-.00270	-.00090	-.00090	-.00020	1.38700	627.40000	.00000
1.050	3.176	.04060	.00160	-.00050	-.00220	-.00060	-.00060	.00020	.54060	627.40000	.00020
1.048	6.109	.01100	.00100	-.00070	-.00210	-.00050	-.00050	.00000	.62100	627.40000	.00010
1.046	9.141	-.00170	.00050	-.00050	-.00110	-.00090	-.00090	.00020	.63400	627.40000	.00010
1.048	12.150	-.01030	-.00310	.00140	.00060	-.00020	-.00020	.00090	.63840	627.40000	-.00040
1.047	15.210	-.01900	.00280	-.00080	.00090	-.00090	-.00090	.00020	.64100	627.40000	.00010
1.046	18.260	-.02980	.00840	-.00230	.00080	-.00080	-.00080	.00010	.64350	627.40000	.00020
1.053	21.280	-.03820	.01060	-.00320	.00010	-.00090	-.00090	.00010	.64460	627.40000	.00020
1.048	24.380	.00220	.00210	-.00010	.00010	-.00050	-.00050	.00050	.63210	627.40000	-.00010
1.050	27.420	.03620	.00800	-.00260	.00000	.00140	.00140	-.00090	.62260	627.40000	.00070
	GRADIENT	-.01224	.00006	-.00007	.00012	.00007	.00007	.00002	-.16254	-.00000	.00002

TABULATED SOURCE DATA - 0453A

DATE 06 JUL 74

(AEJ024) ( 12 MAR 74 )

ARC 11-747 0453A B C M F W L Y NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000  
AILRON = .000 DEFLEP = -11.700  
SPDRK = 55.000 RUDDER = .000  
ELEV-L = .000 ELEV-R = .000

RUN NO. 165 / 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLIMD	CY	CYN	CBL	CYV	CYNV	XCP/L	g	CBLV
1.199	-6.41	.07600	.00110	-.00010	-.00240	.00030	-.00030	1.00900	569.90000	.00030
1.199	.197	.06640	-.00040	.00020	-.00240	-.00090	.00010	1.52900	569.90000	.00000
1.202	3.114	.02790	.00100	-.00010	-.00180	.00090	-.00040	.56660	569.90000	.00030
1.203	6.057	-.00020	.00050	-.00040	-.00110	-.00090	.00010	.63300	569.90000	.00010
1.200	9.078	-.01730	.00090	-.00060	-.00150	-.00160	.00040	.64560	569.90000	.00000
1.197	12.100	-.02520	-.00210	.00090	.00050	-.00080	.00010	.64690	569.90000	.00010
1.195	15.190	-.04110	.00150	-.00060	.00000	-.00110	.00030	.65100	569.90000	.00010
1.195	18.180	-.05540	.00340	-.00090	.00070	-.00060	.00010	.65320	569.90000	.00020
1.196	21.240	-.08080	.00720	-.00180	.00240	-.00060	.00000	.64940	569.90000	.00020
1.195	24.280	-.03300	.00270	.00000	.00100	-.00190	.00070	.64260	569.90000	-.00020
1.201	27.290	-.02350	.00440	-.00040	-.00230	-.00180	.00060	.63920	569.90000	-.00010
	GRADIENT	-.01291	.00011	-.00001	.00017	.00016	-.00006	-.17297	.00000	-.00003

ARC 11-747 0453A B C M F W V NOM. RN/L

(AEJ025) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 352/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	MCP/L	Q	CBLV
.797	-4.933	.07060	.09260	-.00750	.00240	.04170	-.01780	.96700	479.10000	.01230
.798	-2.949	.07200	.05270	-.00330	-.00020	.02290	-.00970	.95840	479.10000	.00680
.799	.027	.07340	-.00090	.00020	-.00210	-.00020	.00000	.92880	479.10000	.00020
.799	3.116	.07160	-.05220	.00300	-.00320	-.02090	.00880	.92430	479.10000	-.00610
.798	5.166	.07000	-.09270	.00710	-.00310	-.03980	.01700	.93000	479.10000	-.01170
.799	6.848	.06690	-.12310	.01020	-.00690	-.05620	.02410	.92310	479.10000	-.01630
	GRADIENT	.00014	-.01793	.00127	-.00067	-.00773	.00328	-.00578	-.00000	-.00227

RUN NO. 178/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	MCP/L	Q	CBLV
.798	-4.954	.06490	.09990	-.00990	.00310	.04400	-.01910	1.00700	641.10000	.01310
.799	-2.963	.06730	.05840	-.00480	.00020	.02430	-.01040	.99970	641.10000	.00730
.798	-.967	.06870	.02050	-.00160	-.00140	.00810	-.00350	.98540	641.10000	.00250
.799	.026	.06880	.00190	-.00020	-.00210	.00010	-.00020	.98110	641.10000	.00020
.798	1.059	.06860	-.01620	.00120	-.00270	-.00810	.00320	.97780	641.10000	-.00210
.798	3.117	.06690	-.05370	.00410	-.00380	-.02330	.00970	.97420	641.10000	-.00670
.797	5.179	.06390	-.09670	.00910	-.00670	-.04390	.01870	.96840	641.10000	-.01260
.797	7.237	.06070	-.13750	.01370	-.00820	-.06420	.02770	.97840	641.10000	-.01840
	GRADIENT	.00028	-.01896	.00169	-.00083	-.00830	.00354	-.00440	-.00000	-.00243

RUN NO. 349/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	MCP/L	Q	CBLV
.903	-4.945	.06620	.11020	-.01400	.00250	.04320	-.02140	1.02100	613.90000	.01460
.902	-2.955	.06990	.06250	-.00700	.00020	.02580	-.01110	1.02200	613.90000	.00780
.897	.028	.06420	.00000	-.00040	-.00200	-.00010	-.00020	.99190	613.90000	.00030
.903	3.121	.09710	-.06140	.00380	-.00330	-.02370	.01080	.98790	613.90000	-.00740
.896	5.185	.08730	-.10700	.01210	-.00530	-.04790	.02050	.96780	613.90000	-.01390
.901	6.734	.08290	-.14040	.01650	-.00650	-.06360	.02750	.96930	613.90000	-.01830
	GRADIENT	.00054	-.02114	.00240	-.00069	-.00915	.00392	-.00482	.00000	-.00269

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(AEJ025) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 ATRON = .0000 BOFLAP = -11.7000  
 SPDRK = 55.0000 RUDPR = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 175/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CVV	CNV	XCP/L	Q	CBLV
1.052	-4.953	.07400	.01150	-.00980	.00860	.04540	-.00200	1.79200	628.00000	.01400
1.051	-2.961	.07290	.05640	-.00420	.00320	.02460	-.00380	1.83200	628.00000	.00770
1.052	-.964	.07620	.01950	-.00130	-.00070	.00870	-.00380	1.59500	628.00000	.00260
1.052	.029	.07700	.00110	-.00020	-.00270	-.00060	.00010	1.47400	628.00000	.00000
1.049	1.057	.07580	-.01710	.00280	-.00440	-.00840	.00340	1.47000	628.00000	-.00220
1.048	3.113	.07500	-.05460	.00350	-.00750	-.02460	.00150	1.44200	628.00000	-.00720
1.053	5.184	.07320	-.09490	.00760	-.01190	-.04360	.00930	1.45900	628.00000	-.01320
1.050	7.007	.07210	-.13140	.01160	-.01570	-.06180	.02770	1.40600	628.00000	-.01850
	GRADIENT	.00028	-.01917	.00158	-.00199	-.00861	.00377	-.05466	.00000	-.00260

RUN NO. 347/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CVV	CNV	XCP/L	Q	CBLV
1.201	-4.944	.06150	.05650	-.00840	.00700	.04460	-.00200	1.68400	572.90000	.01390
1.204	-2.956	.06280	.05580	-.00410	.00270	.02450	-.01110	1.60600	572.90000	.00790
1.202	.028	.06470	-.00130	.00000	-.00190	-.00040	.00000	1.43100	572.90000	.00020
1.199	3.119	.06430	-.05560	.00420	-.00620	-.02540	.01120	1.37300	572.90000	-.00730
1.196	5.180	.06360	-.09550	.00780	-.00960	-.04440	.01990	1.32300	572.90000	-.01310
1.205	6.708	.06270	-.12320	.01000	-.01190	-.05630	.02580	1.28300	572.90000	-.01730
	GRADIENT	.00037	-.01884	.00153	-.00161	-.00861	.00387	-.04461	-.00000	-.00260





ARC 11-747 0453A B C M F M V NOM. RN/L

(AEJ026) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 183/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.600	-5.015	.06940	.08800	-.00650	.00890	.03580	-.01540	.57290	482.00000	.01080
.599	-2.995	.06980	.09050	-.00340	.00350	.01850	-.00810	.57240	482.00000	.00580
.600	-.985	.06940	.01670	-.00110	-.00110	.00650	-.00280	.57190	482.00000	.00210
.599	.027	.06950	.00000	-.00070	-.00330	.00050	-.00030	.57170	482.00000	.00030
.599	1.041	.06910	-.01590	.00020	-.00530	-.00570	.00220	.57290	482.00000	-.00140
.597	3.061	.06790	-.05080	.00290	-.00980	-.01890	.00820	.57340	482.00000	-.00560
.598	5.087	.06560	-.09020	.00640	-.01390	-.03530	.01510	.57560	482.00000	-.01050
.600	7.102	.05950	-.12890	.01050	-.01870	-.05370	.02320	.58100	482.00000	-.01570
.598	9.123	.05740	-.16690	.01390	-.02340	-.07400	.03180	.58290	482.00000	-.02110
GRADIENT		-.00030	-.01666	.00100	-.00215	-.00616	.00264	.00020	-.00000	-.00187

RUN NO. 179/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.796	-5.033	.06820	.09530	-.00660	.00870	.03590	-.01590	.57640	639.10000	.01120
.797	-3.006	.07020	.05610	-.00430	.00390	.02060	-.00990	.57460	639.10000	.00650
.796	-.984	.07070	.01880	-.00200	-.00090	.00720	-.00310	.57360	639.10000	.00230
.795	.028	.07150	-.00010	-.00080	-.00180	.00020	-.00020	.57240	639.10000	.00020
.801	1.046	.07210	-.01880	.00060	-.00190	-.00600	.00250	.57220	639.10000	-.00170
.800	3.073	.07010	-.05420	.00320	-.00680	-.01960	.00850	.57340	639.10000	-.00600
.795	5.107	.06800	-.09450	.00640	-.01060	-.03520	.01540	.57540	639.10000	-.01070
.799	7.144	.06380	-.13520	.01010	-.01590	-.05460	.02390	.57920	639.10000	-.01610
.796	9.168	.05560	-.17620	.01350	-.02020	-.07310	.03210	.58660	639.10000	-.02140
GRADIENT		.00005	-.01815	.00124	-.00159	-.00660	.00287	-.00025	.00000	-.00205

RUN NO. 350/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.034	.06210	.10040	-.00820	.01110	.03700	-.01670	.58150	613.00000	.01180
.903	-3.008	.06020	.05900	-.00510	.00640	.02030	-.00930	.58350	613.00000	.00670
.899	.030	.06380	-.00140	-.00130	-.00040	.00000	-.00020	.57920	613.00000	.00020
.902	3.076	.05970	-.00770	.00270	-.00030	-.02090	.00930	.58330	613.00000	-.00640
.898	5.106	.06230	-.09850	.00580	-.01270	-.03690	.01640	.58020	613.00000	-.01140
.903	7.137	.05600	-.14000	.00940	-.01750	-.05260	.02360	.58620	613.00000	-.01620
GRADIENT		-.00008	-.01918	.00128	-.00225	-.00677	.00306	-.00003	.00000	-.00215

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F M V NOM. RN/L

(AEJ026) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 171/ 0 RN/L = .50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFW/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.051	-5.027	.00240	.09630	-.00920	.01240	.03850	-.01820	.63240	628.70000	.01280
1.053	-3.007	-.00310	.05720	-.00530	.00660	.02190	-.01040	.63470	628.70000	.00730
1.047	-.985	-.00310	.01890	-.00150	.00180	.00680	-.00330	.63480	628.70000	.00240
1.050	.030	-.00490	-.00110	.00040	-.00040	-.00080	.00020	.63590	628.70000	.00000
1.049	1.043	-.00470	-.01930	.00210	-.00250	-.00820	.00360	.63580	628.70000	-.00240
1.052	3.065	-.00560	-.00370	.00530	-.00740	.02270	.01330	.63640	628.70000	-.00700
1.047	5.099	-.00160	-.00390	.00970	-.01280	-.03940	.01820	.63380	628.70000	-.01240
1.050	7.125	.00330	-.00070	.01210	-.01720	-.05490	.02540	.63060	628.70000	-.01730
1.047	9.151	.00160	-.00640	.01410	-.02240	-.07080	.03290	.63170	628.70000	-.02210
	GRADIENT	-.00045	-.01852	.00175	-.00229	-.00735	.00341	.00030	-.00000	-.00236

RUN NO. 167/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFW/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.202	-5.030	-.01900	.08360	-.00570	.01140	.03210	-.01540	.64540	570.80000	.01190
1.202	-3.002	-.01930	.05330	-.00310	.00600	.01880	-.00890	.64560	570.80000	.00640
1.199	-.981	-.02190	.01360	-.00150	.00080	.00570	-.00290	.64670	570.80000	.00220
1.201	.033	-.02120	.00210	-.00080	-.00110	-.00120	.00020	.64630	570.80000	.00000
1.197	1.038	-.01250	-.01370	.00030	-.00300	.00730	.00310	.64770	570.80000	-.00180
1.199	3.066	-.02290	-.04880	.00260	-.00820	.01970	.00890	.64870	570.80000	-.00600
1.198	5.095	-.02060	-.00420	.00480	-.01010	.03440	.01570	.64600	570.80000	-.01030
1.197	7.119	-.01540	-.02020	.00690	-.01550	-.04980	.02330	.64330	570.80000	-.01570
1.200	9.157	-.01570	-.01590	.00700	-.01840	-.06320	.02970	.64330	570.80000	-.01930
	GRADIENT	-.00061	-.01679	.00093	-.00200	-.00635	.00294	.00041	-.00000	-.00204



DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V NOM. RN/L

(AEJ027) (12 MAR 74)

## REFERENCE DATA

SCEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0005 ELEVON = .0000  
 ALLRON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.600	-5.002	.04410	.09980	-.00910	.01090	.032 0	-.01480	.61600	483.20000	.01080
.600	-2.992	.04300	.06190	-.02680	.04620	.01730	-.00800	.61650	483.20000	.00600
.600	.026	.04310	.02250	-.00170	.00220	-.00120	.00030	.61660	483.20000	-.00020
.599	3.069	.04380	-.05620	.00370	-.00670	-.01320	.00850	.61620	483.20000	-.00600
.599	5.095	.04510	-.09530	.00760	-.01220	-.03320	.01490	.61560	483.20000	-.01060
.599	7.120	.04680	-.13260	.01120	-.01750	-.05120	.02290	.61730	483.20000	-.01600
	GRADIENT	.00013	-.01948	.00173	-.00213	-.00602	.00272	-.00005	-.00000	-.00198

RUN NO. 180/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.798	-5.047	.06690	.10120	.00550	.00750	.01740	-.01020	.60650	641.10000	.00830
.798	-3.012	.06850	.05890	.00180	.00330	.01190	-.00680	.60570	641.10000	.00530
.798	-.981	.06950	.01590	-.00140	.00200	.00510	-.00260	.60530	641.10000	.00210
.798	.033	.06900	-.00350	-.00280	-.00180	.00190	-.00070	.60540	641.10000	.00060
.798	1.057	.06970	-.02020	-.00430	-.00370	-.00170	.00130	.60500	641.10000	-.00090
.797	3.096	.06920	-.05470	-.00730	-.00860	-.00750	.00460	.60510	641.10000	-.00370
.794	5.146	.06530	-.08940	-.00970	-.01210	-.01220	.00790	.60670	641.10000	-.00660
.796	7.185	.06170	-.12260	-.01300	-.01670	-.01880	.01160	.60810	641.10000	-.00940
.797	9.230	.05640	-.16380	-.01630	-.01700	-.02970	.01700	.61030	641.10000	-.01290
	GRADIENT	.00011	-.01850	-.00148	-.00194	-.00519	.00184	-.00010	-.00000	-.00147

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.902	-5.060	.06330	.09010	.01670	.00920	.00200	-.00420	.60730	615.90000	.00470
.901	-3.017	.05940	.05600	.00580	.00490	.00740	-.00490	.60920	615.90000	.00420
.902	.034	.05540	.00080	-.00360	.00210	.00200	-.00100	.61090	615.90000	.00080
.899	3.101	.05720	-.04960	-.01180	-.00540	-.00190	.00230	.61010	615.90000	-.00220
.905	5.143	.05610	-.07900	-.01800	-.01030	-.00470	.00320	.61040	615.90000	-.00370
.897	7.185	.05060	-.11500	-.02340	-.01290	-.00460	.00580	.61020	615.90000	-.00570
	GRADIENT	-.00036	-.01726	-.00288	-.00162	-.00052	.00118	.00018	-.00000	-.00105

ARC 11-747 0453A B C M F W V NOM. RN/L

(AEJ027) (12 MAR 74)

## REFERENCE DATA

SHEP = 2.4210 SQ.FT. ZMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 172/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.052	-5.045	-0.0050	.00110	.00220	.01450	.01210	-.00340	.64280	628.40000	.00750
1.051	-3.013	-0.00560	.00780	-.00160	.00380	.00820	-.00650	.64440	628.40000	.00510
1.051	-.907	-.04180	.03170	-.00370	.00180	.00330	-.00260	.64620	628.40000	.00220
1.048	.019	-.04180	.01230	-.00380	-.00130	.00040	-.00040	.64620	628.40000	.00050
1.050	1.041	-.04150	-.00970	-.00250	-.00300	-.00350	.00220	.64610	628.40000	-.00140
1.048	3.086	-.03490	-.00210	-.00120	-.00080	-.01100	.00700	.64410	628.40000	-.00490
1.051	5.125	-.02690	-.00700	-.00270	-.01250	-.01300	.00930	.64170	628.40000	-.00720
1.053	7.162	-.02500	-.01700	-.00720	-.01620	-.01610	.01170	.64110	628.40000	-.00940
1.051	9.216	-.02340	-.01450	-.01480	-.01800	-.01830	.01350	.64060	628.40000	-.01090
	GRADIENT	.00012	-.01974	.00042	-.00295	-.00324	.00223	-.00005	.00000	-.01165

RUN NO. 348/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.050	-5.035	-.04690	.09350	.00490	.01010	.00390	-.01590	.64440	572.70000	.00530
1.053	-3.010	-.00570	.00640	.00240	.00740	.00340	-.00420	.65160	572.70000	.00350
1.052	.021	-.00560	.00360	-.00100	.00170	-.01170	.00050	.65240	572.70000	.00000
1.139	3.078	-.00550	-.04890	-.00360	-.00470	-.00650	.00500	.65100	572.70000	-.00360
1.137	5.122	-.00520	-.08140	-.00690	-.00750	-.00700	.00560	.65180	572.70000	-.00530
1.139	7.156	-.00480	-.01390	-.01030	-.01110	-.00860	.00820	.64940	572.70000	-.00700
	GRADIENT	.00000	-.01730	-.00094	-.00199	-.00163	.00131	-.00000	.00000	-.00117

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F 12 Y NDM. RN/L

(AEJ028) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILERON = .000 BDFLAP = .000  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 284 / 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.597	-1.633	.03800	-.00170	-.00010	-.00200	-.00110	.00020	.79400	477.10000	.00020
.598	-.086	.03940	-.00120	-.00010	-.00210	-.00120	.00060	.88750	477.10000	.00000
.600	.593	.03940	-.00080	-.00040	-.00210	-.00180	.00040	1.09700	477.10000	.00010
.605	1.615	.03870	-.00150	-.00040	-.00230	-.00240	.00000	-.19350	477.10000	.00030
.599	3.567	.03870	-.00120	-.00060	-.00240	-.00290	.00010	.50500	477.10000	.00020
.598	5.534	.03740	-.00120	-.00070	-.00270	-.00130	.00030	.56720	477.10000	.00010
.597	7.611	.03500	-.00100	-.00100	-.00300	-.00140	.00030	.59200	477.10000	.00010
.597	9.598	.03220	-.00050	-.00060	-.00320	-.00120	.00020	.60400	477.10000	.00020
.598	15.690	.02350	-.00120	-.00170	-.00370	-.00120	.00030	.61370	477.10000	.00020
.599	18.730	.01290	-.00080	-.00200	-.00400	-.00180	.00050	.62120	477.10000	.00000
.595	21.720	.00630	-.00060	-.00260	-.00410	-.00190	.00030	.62760	477.10000	.00010
.598	24.710	.00280	-.00040	-.00300	-.00410	-.00190	.00050	.63060	477.10000	.00010
.598	28.650	.11600	-.00260	-.00310	-.00420	-.00190	.00050	.62420	477.10000	-.00010
	GRADIENT	-.00011	.00005	-.00012	-.00010	.00021	-.00008	.59450	477.10000	.00025
								-.14285	.00000	.00003

RUN NO. 283 / 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIMD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.600	-1.665	.04710	.00040	-.00050	-.00220	-.00060	.00000	.80640	641.80000	.00020
.601	-.073	.04670	-.00040	-.00060	-.00220	-.00140	.00000	.89700	641.80000	.00010
.601	1.102	.04520	.00020	-.00070	-.00230	-.00030	-.00010	2.18900	641.80000	.00030
.601	1.612	.04510	.00020	-.00080	-.00240	-.00100	.00000	-.43350	641.80000	.00020
.602	3.552	.04490	.00130	-.00080	-.00250	-.00040	.00000	.49130	641.80000	.00030
.601	5.552	.04030	-.00040	-.00070	-.00330	-.00040	.00000	.56750	641.80000	.00020
.799	7.607	.03320	-.00030	-.00110	-.00350	-.00050	.00000	.59690	641.80000	.00030
.800	9.581	.02920	-.00030	-.00130	-.00320	-.00020	.00000	.60860	641.80000	.00020
.798	12.610	.02990	-.00190	-.00180	-.00360	-.00080	.00000	.61400	641.80000	.00010
.800	15.720	.01800	-.00040	-.00200	-.00390	-.00010	.00000	.62380	641.80000	.00030
.799	18.730	.01550	-.00020	-.00450	-.00350	-.00020	.00000	.62640	641.80000	.00030
.798	21.740	.03120	-.00120	-.00470	-.00350	-.00090	-.00000	.62160	641.80000	.00010
.799	24.700	.00620	.00460	-.00670	-.00350	-.00260	-.00000	.60300	641.80000	.00020
.796	28.660	.11610	.00030	-.00580	-.00440	.00630	-.00000	.59410	641.80000	.00020
	GRADIENT	-.00055	.00027	-.00007	-.00008	.00011	-.00002	-.14319	.00000	.00003

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F 12 V NOM. RN/L

(AEJ028) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 S.F.T. XREF = 32.3010 IN.  
 CREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 26.1024 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = .0000  
 SPOBCK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 282/0 RN/L = 3.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.898	-1.662	.05440	.00140	-.00100	-.00170	-.00030	.00030	.83440	609.90000	.00020
.899	-1.659	.05330	-.00060	-.00070	-.00190	.00010	.00010	.95680	609.90000	.00020
.899	1.074	.04560	.00120	-.00090	-.00220	-.00070	-.00070	-3.94000	609.90000	.00030
.899	1.682	.04280	-.00030	-.00100	-.00220	-.00090	.00010	.19200	609.90000	.00030
.892	3.535	.03770	.00060	-.00100	-.00190	-.00050	-.00010	.53720	609.90000	.00040
.893	5.035	.03490	-.00040	-.00100	-.00190	-.00080	.00010	.58040	609.90000	.00020
.893	7.536	.02920	-.00060	-.00080	-.00150	-.00030	.00010	.60190	609.90000	.00010
.899	9.565	.02560	.00030	-.00130	-.00230	-.00030	-.00010	.61160	609.90000	.00010
.897	12.593	.01720	-.00030	-.00110	-.00190	-.00020	-.00010	.62210	609.90000	.00010
.894	15.650	.00930	-.00080	-.00020	-.00200	-.00010	.00010	.63150	609.90000	.00010
.894	18.710	.00190	-.00120	-.00030	-.00200	-.00050	-.00040	.64130	609.90000	.00050
.890	21.720	.00220	.00130	-.00030	-.00210	-.00070	-.00070	.64400	609.90000	.00060
.890	24.710	.00440	.00030	-.00040	-.00190	-.00080	-.00050	.65200	609.90000	.00060
.891	28.680	.00030	.00340	-.00060	-.00030	-.00170	-.00010	.65830	609.90000	.00010
GRADIENT		.00030	-.00010	-.00010	.00000	.00020	-.00010	-.00010	.00000	.00005

RUN NO. 281/0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.070	-1.653	.05170	-.00020	-.00040	-.00170	-.00040	.00010	.74470	626.90000	.00010
1.071	-1.642	.04340	-.00010	-.00020	-.00160	.00040	.00040	.80490	626.90000	.00010
1.052	1.066	.02910	-.00050	-.00050	-.00200	.00050	.00050	.41110	626.90000	.00010
1.055	1.532	.02240	-.00040	-.00050	-.00220	-.00010	.00010	.53130	626.90000	.00010
1.050	3.537	.00660	-.00010	-.00050	-.00210	-.00010	.00010	.61150	626.90000	.00020
1.051	5.038	.00110	-.00010	-.00060	-.00170	-.00030	.00010	.65200	626.90000	.00030
1.054	7.592	.00290	.00150	-.00130	-.00140	.00030	.00030	.65700	626.90000	.00020
1.051	9.569	.00340	-.00020	-.00070	-.00170	.00010	.00010	.65530	626.90000	.00000
1.050	12.590	.00460	-.00040	-.00010	-.00200	-.00010	.00010	.65610	626.90000	.00010
1.49	15.650	.00550	.00020	-.00020	-.00200	-.00010	.00010	.65360	626.90000	.00010
1.049	18.710	.00700	.00010	-.00010	-.00110	.00010	.00010	.65920	626.90000	.00030
1.050	21.750	.00930	.00030	-.00040	-.00160	.00010	.00010	.65990	626.90000	.00000
1.051	24.720	.00490	.00180	-.00040	-.00120	.00010	.00010	.64580	626.90000	.00010
1.051	28.630	.00990	.00130	-.00030	-.00090	-.00070	-.00010	.63010	626.90000	.00010
GRADIENT		.00120	-.00005	-.00005	.00011	.00018	-.00002	-.00012	.00000	.00002

DATE 06 JUL 74

TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A 0 C M F W V NOM. RN/L

IAEJ028) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 32.47.  
 LREF = 11.2410 IN.  
 BREF = 24.1004 IN.  
 SCALE = .0300 SCALE

XNRP = 32.3010 IN.  
 YNRP = .0000 IN.  
 ZNRP = 11.2500 IN.

BETA = .000  
 ALLRON = .000  
 SPDRK = 25.000  
 ELEV-L = .000  
 ELEV-R = .000

ELEVON = .000  
 ODELAP = .000  
 RUDDER = .000  
 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 285/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFC	CY	CYN	COL	CYV	CYV	XCP/L	Q	CRV
1.200	-0.655	0.03630	0.0150	-0.0010	-0.00200	-0.00210	0.00350	0.85590	567.30000	0.00000
1.204	0.048	0.02620	0.0020	0.0000	-0.00200	-0.00130	0.00150	1.63300	567.30000	0.00000
1.208	1.056	0.01420	0.0050	-0.0010	-0.00180	-0.00150	0.00230	0.53600	567.30000	0.0010
1.190	1.370	0.00810	0.0010	0.0000	-0.00190	-0.00130	0.00230	0.59830	567.30000	0.0010
1.194	3.341	-0.01410	0.0180	-0.0020	-0.00180	-0.00160	0.00220	0.65790	567.30000	0.0030
1.199	5.511	-0.03130	0.0130	-0.0040	-0.00170	-0.00180	0.00240	0.66910	567.30000	0.0010
1.199	7.594	-0.04460	0.0240	-0.0030	-0.00180	-0.00190	0.00250	0.67070	567.30000	0.0010
1.201	9.562	-0.05210	0.0310	-0.0030	-0.00160	-0.00150	0.00230	0.66830	567.30000	0.0020
1.197	12.595	-0.06140	0.0020	0.0000	-0.0010	-0.0020	0.00260	0.56460	567.30000	0.0010
1.196	15.650	-0.07810	0.0260	-0.0070	-0.0020	-0.00210	0.00270	0.66530	567.30000	0.0000
1.197	18.700	-0.09330	0.0350	-0.0120	-0.0040	-0.0010	0.00240	0.66460	567.30000	0.0010
1.197	21.690	-0.08710	0.0120	0.0030	-0.0140	-0.0020	0.00280	0.66010	567.30000	-0.0010
1.197	24.690	-0.07420	0.0500	-0.0090	-0.0060	-0.0050	0.00280	0.65400	567.30000	-0.0010
1.196	28.610	-0.05180	0.0670	-0.0140	-0.0130	-0.0130	0.00280	0.64630	567.30000	-0.0010
	GRADIENT		0.0015	-0.0003	0.0010	0.0036	-0.0012	-1.14259	0.00000	0.00000

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 ALLRON = .0000 BDFLAP = -11.700  
 SPBRK = 25.0000 RUDDER = -10.0000  
 CLEV-L = .0000 ELEV-R = .0000

RUN NO. 219/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.598	-4.947	.05470	.06340	.00750	-.00570	.01400	-.00380	.92870	475.800000	.00320
.600	-2.954	.05600	.02440	.01170	-.00860	-.00660	.00520	.92330	475.800000	-.00280
.605	-.976	.05720	-.00920	.01350	-.01300	-.00200	.01100	.91400	475.800000	-.00690
.598	.019	.05750	-.02640	.01440	-.01070	-.02750	.01420	.89810	475.800000	-.00910
.601	1.046	.05740	-.04310	.01530	-.01100	-.03480	.01720	.89440	475.800000	-.01120
.599	3.111	.05570	-.07950	.01730	-.01200	-.04880	.02320	.89220	475.800000	-.01550
.597	5.161	.05340	-.11670	.02220	-.01330	-.06740	.03100	.88740	475.800000	-.02080
.599	6.745	.05210	-.14460	.02180	-.01430	-.07880	.03580	.89300	475.800000	-.02400
	GRADIENT	.00223	-.01758	.00116	-.00075	-.00706	.00327	-.00517	-.00000	-.00223

RUN NO. 214/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.799	-4.958	.06300	.07030	.00560	-.00600	.01740	-.00470	.94530	642.800000	.00490
.801	-2.969	.06500	.02890	.01100	-.00920	-.00420	.00460	.93950	642.800000	-.00230
.802	-.977	.06760	-.00760	.01340	-.01060	-.01900	.01100	.92720	642.800000	-.00690
.803	.022	.06770	-.02680	.01470	-.01140	-.02780	.01470	.92230	642.800000	-.00940
.800	1.050	.06770	-.04480	.01630	-.01220	-.03600	.01810	.92020	642.800000	-.01170
.797	3.112	.06550	-.08200	.01910	-.01320	-.05160	.02480	.91860	642.800000	-.01640
.796	5.179	.06350	-.12230	.02250	-.01450	-.06860	.03200	.91680	642.800000	-.02140
	GRADIENT	.00248	-.01679	.00160	-.00287	-.00844	.00350	-.00367	-.00000	-.00250

RUN NO. 213/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-4.961	.06300	.08150	.00230	-.00750	.02180	-.00590	1.04000	616.300000	.00470
.902	-2.967	.06690	.03460	.00880	-.00970	-.00240	.00410	1.02900	616.300000	-.00180
.901	-.977	.07370	-.00570	.01300	-.01100	-.01930	.01140	1.01200	616.300000	-.00690
.904	.019	.07100	-.02530	.01460	-.01140	-.02790	.01460	1.00300	616.300000	-.00920
.906	1.050	.07080	-.04490	.01620	-.01190	-.03460	.01790	1.00400	616.300000	-.01150
.903	3.111	.06900	-.08680	.02100	-.01270	-.05390	.02600	.98570	616.300000	-.01710
.905	5.174	.06520	-.13200	.02620	-.01390	-.07330	.03430	.96330	616.300000	-.02280
.899	6.765	.06660	-.15600	.02490	-.01160	-.07970	.03590	.95890	616.300000	-.02360
	GRADIENT	.00283	-.02066	.00222	-.00462	-.00901	.00384	-.00672	-.00000	-.00265



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TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C H F W V NON. RN/L

(AEJ029) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELLWLN = .000  
 AILRON = .000 BDFLAP = -11.700  
 SF08RK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 205/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.052	-4.961	.05240	.07250	.00550	-.00760	.01860	-.00530	1.62200	628.30000	.00480
1.054	-2.963	.05360	.03180	.01020	-.00530	-.00070	.00360	1.61600	628.30000	-.00120
1.051	-.985	.05470	-.00470	.01330	-.00950	-.01710	.01090	1.45600	628.30000	-.00630
1.048	.018	.05770	-.02420	.01450	-.01150	-.02680	.01500	1.31500	628.30000	-.00910
1.050	1.049	.05810	-.04230	.01570	-.01320	-.03460	.01830	1.30700	628.30000	-.01140
1.053	3.114	.05800	-.07900	.01800	-.01630	-.05060	.02520	1.30400	628.30000	-.01620
1.051	5.177	.05500	-.11910	.02160	-.02020	-.06780	.03310	1.27000	628.30000	-.02170
1.050	6.863	.05500	-.15210	.02450	-.02320	-.00000	.04000	1.25300	628.30000	-.00000
	GRADIENT	.00281	-.01873	.00152	-.00196	-.00858	.00377	-.04878	.00000	-.00260

RUN NO. 205/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.202	-4.950	.03840	.07250	.00500	-.00070	.02210	-.00750	2.23700	569.90000	.00610
1.199	-2.953	.04070	.03370	.00860	-.00490	.00240	.00150	2.02400	569.90000	.00010
1.199	-.966	.04230	-.00110	.01110	-.00800	-.01350	.00860	1.67700	569.90000	-.00480
1.201	.020	.04250	-.02070	.01230	-.00960	-.02200	.01240	1.54100	569.90000	-.00740
1.202	1.049	.04300	-.03780	.01350	-.01090	-.02930	.01570	1.50900	569.90000	-.00970
1.199	3.121	.04340	-.07430	.01620	-.01330	-.04590	.02300	1.45100	569.90000	-.01480
1.201	5.173	.04430	-.11340	.01880	-.01620	-.06320	.03080	1.35000	569.90000	-.02010
1.203	6.751	.04550	-.14170	.02020	-.01850	-.07500	.03630	1.28000	569.90000	-.02380
	GRADIENT	.00262	-.01816	.00136	-.00156	-.00835	.00374	-.10610	-.00000	-.00257

ARC 11-747 0453A B C H F M V NMH. RN/L

(AEJ030) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .0000  
 AILRON = .0000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 218/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.598	-5.017	.05120	.06040	.00660	.00220	.01160	-.00300	.58990	480.80000	.00290
.597	-3.002	.05130	.02550	.00980	-.00350	-.00530	.00430	.58960	480.80000	-.00210
.598	-.983	.05080	-.00630	.01150	-.00810	-.01710	.00950	.58950	480.80000	-.00580
.600	.022	.05030	-.02390	.01250	-.01040	-.02320	.01210	.58550	480.80000	-.00770
.599	1.037	.05020	-.04060	.01320	-.01270	-.02930	.01460	.59030	480.80000	-.00950
.598	3.054	.04910	-.07410	.01530	-.01630	-.04180	.01990	.59100	480.80000	-.01330
.599	5.080	.04720	-.11130	.01790	-.02050	-.05750	.02650	.59250	480.80000	-.01790
.597	7.101	.04520	-.14870	.01960	-.02380	-.07360	.03300	.59410	480.80000	-.02200
.599	9.131	.04620	-.17720	.01960	-.02640	-.08500	.03750	.59300	480.80000	-.02480
GRADIENT		-.00236	-.01650	.00090	-.00213	-.02603	.00257	.00025	.00000	-.00185

RUN NO. 215/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.798	-5.040	.04780	.06860	.00650	.00370	.01210	-.00330	.59390	541.30000	.00320
.800	-3.012	.04980	.03000	.00920	-.00420	-.00430	.00410	.59230	541.30000	-.00180
.800	-.987	.05030	-.00620	.01120	-.00860	-.01750	.00990	.59120	541.30000	-.00600
.800	.025	.05190	-.02570	.01250	-.00930	-.02410	.01080	.58960	541.30000	-.00810
.799	1.040	.05150	-.04360	.01400	-.00990	-.03050	.01560	.59030	541.30000	-.01010
.797	3.065	.05030	-.07740	.01580	-.01400	-.04300	.02090	.59080	541.30000	-.01400
.799	5.102	.04910	-.11510	.01780	-.01780	-.05680	.02670	.59170	541.30000	-.01810
.800	7.132	.04720	-.15460	.01980	-.02160	-.07170	.03300	.59340	541.30000	-.02230
.800	9.161	.04450	-.18690	.01930	-.02370	-.08460	.03790	.59590	541.30000	-.02510
GRADIENT		.00013	-.01775	.00112	-.00152	-.00637	.00277	-.00027	.00000	-.00201

RUN NO. 212/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BE.A	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.043	.04130	.07300	.00630	.00330	.01170	-.00310	.60000	615.90000	.00310
.903	-3.013	.04120	.03340	.00930	-.00180	-.00490	.00440	.60010	615.90000	-.00200
.903	-.990	.04170	-.00560	.01130	-.00640	-.01750	.01010	.59940	615.90000	-.00620
.904	.022	.04190	-.02450	.01230	-.00830	-.02360	.01280	.59920	615.90000	-.00930
.900	1.037	.04390	-.04190	.01310	-.01030	-.02950	.01550	.59750	615.90000	-.01000
.902	3.069	.04060	-.07980	.01560	-.01470	-.04330	.02160	.60040	615.90000	-.01440
.902	5.101	.04040	-.11980	.01760	-.01980	-.05750	.02750	.60020	615.90000	-.01870
.901	7.133	.04350	-.15620	.01800	-.02270	-.06820	.03200	.59740	615.90000	-.02170
.909	8.472	.03770	-.18130	.01810	-.02460	-.07500	.03480	.60240	615.90000	-.02350
GRADIENT		.00002	-.01954	.00102	-.00210	-.00627	.00231	-.00005	-.00000	-.00202



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(AEJ030) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 209/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFLO	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
1.053	-5.036	-0.01740	.06750	.00580	.00360	.01250	-.00360	.64400	629.70000	.00380
1.052	-3.013	-0.01870	.02860	.00960	-.00150	-.00350	.00400	.64480	629.70000	-.00140
1.050	-.990	-0.01950	-.00440	.01180	-.00630	-.01610	.00990	.64540	629.70000	-.00570
1.051	.019	-0.01930	-.02310	.01350	-.00810	-.02280	.01300	.64520	629.70000	-.00790
1.050	1.036	-0.01870	-.04170	.01490	-.01020	-.02960	.01620	.64480	629.70000	-.01010
1.049	3.062	-0.01780	-.07670	.01810	-.01440	-.04420	.02280	.64420	629.70000	-.01470
1.050	5.090	-0.01630	-.11310	.02080	-.01940	-.05870	.02940	.64330	629.70000	-.01930
1.046	7.116	-0.01220	-.15020	.02330	-.02410	-.07340	.03630	.64070	629.70000	-.02310
1.048	9.146	-0.00920	-.18390	.02390	-.02790	-.09200	.04220	.63880	629.70000	-.02600
	GRADIENT	.00017	-.01744	.00141	-.00210	-.00670	.00310	-.00012	.00000	-.00219

RUN NO. 206/0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFLO	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
1.198	-5.027	-0.03640	.06480	.00730	.00350	.01110	-.00340	.65650	569.30000	.00360
1.198	-3.003	-0.03690	.03100	.00870	-.00060	-.00260	.00230	.65690	569.30000	-.00050
1.201	-.990	-0.03910	.00050	.00950	-.00170	-.01300	.00790	.65840	569.30000	-.00440
1.200	.021	-0.03930	-.01680	.01010	-.00760	-.01940	.01080	.65850	569.30000	-.00630
1.199	1.040	-0.03910	-.03320	.01070	-.00950	-.02480	.01340	.65810	569.30000	-.00810
1.199	3.054	-0.03900	-.06500	.01250	-.01240	-.03730	.01910	.65820	569.30000	-.01210
1.196	5.091	-0.03610	-.10140	.01410	-.01560	-.05010	.02510	.65660	569.30000	-.01640
1.197	7.110	-0.03190	-.13690	.01540	-.02070	-.06360	.03150	.65420	569.30000	-.02080
1.201	9.144	-0.03090	-.16740	.01450	-.02320	-.07580	.03710	.65360	569.30000	-.02460
	GRADIENT	-.00031	-.01593	.00062	-.00194	-.00603	.00277	.00018	-.00000	-.00191

ARC 11-747 QAS3A B C M F W V NOM. MN/L

(AEJ031) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

XRFP = 32.3010 IN.  
 YRFP = .0000 IN.  
 ZRFP = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRCON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 217/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.602	-5.009	.02540	.07680	.00310	.00520	.01010	-.00330	.62320	484.90000	.00370
.600	-2.994	.02600	.03670	.00680	.00000	-.00660	.00430	.62300	484.90000	-.00170
.598	-.985	.02680	-.00300	.01070	-.00570	-.01930	.01320	.62280	484.90000	-.00610
.598	.017	.02690	-.02060	.01210	-.00850	-.02490	.01270	.62270	484.90000	-.00200
.598	1.039	.02740	-.03840	.01350	-.01070	-.03030	.01520	.62250	484.90000	-.00980
.599	3.063	.02690	-.07840	.01700	-.01600	-.04370	.02110	.62270	484.90000	-.01410
.601	5.090	.02840	-.11900	.02110	-.02130	-.05370	.02790	.62200	484.90000	-.01900
.599	7.116	.02410	-.15010	.02140	-.02480	-.07070	.03270	.62370	484.90000	-.02220
.600	9.143	.01730	-.18170	.02190	-.02940	-.08270	.03760	.62620	484.90000	.02520
	GRADIENT	.02016	-.01885	.00165	-.00262	-.00606	.00274	-.00006	-.00000	-.00203

RUN NO. 216/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.798	-5.056	.04550	.07880	.01520	.00200	-.00040	-.00050	.61500	641.30000	.00220
.802	-3.020	.04700	.03350	.01400	-.00290	-.00950	.00490	.61350	641.30000	-.00210
.796	-.986	.04680	-.01090	.01190	-.00700	-.00920	.01050	.61390	641.30000	-.00600
.797	.030	.04660	-.02910	.01100	-.00930	-.02350	.01280	.61550	641.30000	-.00780
.801	1.055	.04780	-.04880	.01030	-.01160	-.02800	.01520	.61380	641.30000	-.00970
.796	3.090	.04740	-.08480	.00790	-.01650	-.03520	.01920	.61390	641.30000	-.01280
.799	5.134	.04540	-.11180	.00510	-.02070	-.04020	.02240	.61460	641.30000	-.01570
.797	7.179	.04450	-.14790	-.00020	-.02340	-.04250	.02390	.61490	641.30000	-.01720
.794	9.224	.04340	-.18360	-.00520	-.02220	-.05390	.02760	.61540	641.30000	-.01970
	GRADIENT	-.00224	-.01929	-.00098	-.00223	-.00422	.00235	.00007	-.00000	-.00176

RUN NO. 211/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.901	-5.061	.04600	.06730	.02500	.00680	-.01420	.00460	.61420	614.90000	-.00110
.903	-3.022	.03980	.02880	.01970	-.00120	-.01660	.00780	.61720	614.90000	-.00390
.900	-.989	.03890	-.01040	.01540	-.00620	-.02100	.01140	.61750	614.90000	-.00690
.900	.028	.03650	-.03040	.01290	-.00800	-.02580	.01400	.61850	614.90000	-.00860
.902	1.054	.03730	-.04870	.01040	-.01170	-.02870	.01590	.61820	614.90000	-.01000
.899	3.094	.03960	-.08150	.00480	-.01520	-.02990	.01770	.61710	614.90000	-.01210
.901	5.138	.03890	-.10880	-.00140	-.02000	-.02990	.01900	.61750	614.90000	-.01370
.904	7.180	.04210	-.13590	-.01100	-.02150	-.02610	.01760	.61670	614.90000	-.01330
.903	9.227	.04480	-.16860	-.01840	-.02280	-.02870	.01870	.61480	614.90000	-.01400
	GRADIENT	-.00011	-.01810	-.00244	-.00228	-.00233	.00168	.00002	.00000	-.00136

ARC 11-747 0453A B C M F VA V NDM. RN/L

(AEJ031) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1054 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPDGRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 210/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.048	-5.046	-.05020	.07350	.01640	.00680	-.01190	.00420	.64900	626.50000	-.00080
1.055	-3.021	-.05540	.03950	.01270	.00180	-.01570	.00730	.65060	626.50000	-.00330
1.051	-.997	-.06790	.00780	.00960	-.00600	-.01880	.01010	.65220	626.50000	-.00550
1.049	.020	-.06120	-.01030	.00860	-.00890	-.02050	.01160	.65220	626.50000	-.00670
1.047	1.038	-.05880	-.02990	.00900	-.01070	-.02260	.01340	.65150	626.50000	-.00810
1.051	3.078	-.05140	-.07280	.01030	-.01460	-.02970	.01800	.64940	626.50000	-.01150
1.046	5.114	-.04360	-.10670	.00750	-.01880	-.03260	.02070	.64700	626.50000	-.01400
1.046	7.154	-.03890	-.13760	.00350	-.02270	-.03570	.02300	.64560	626.50000	-.01630
1.050	9.198	-.03880	-.16100	.00430	-.02420	-.03710	.02410	.64570	626.50000	-.01750
	GRADIENT	.00070	-.01843	-.00038	-.00265	-.00225	.00174	-.00021	.00000	-.00134

RUN NO. 207/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CL/FWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.200	-5.041	-.06890	.06940	.01760	.00260	-.01600	.00560	.65600	569.50000	-.00170
1.200	-3.012	-.07230	.03940	.01250	-.00290	-.01610	.00690	.65700	569.50000	-.00320
1.198	-.995	-.07010	.00400	.01090	-.00350	-.01850	.00950	.65630	569.50000	-.00510
1.195	.024	-.06960	-.01410	.01010	-.00510	-.01900	.01050	.65610	569.50000	-.00600
1.195	1.035	-.07030	-.02940	.00840	-.00700	-.01980	.01170	.65630	569.50000	-.00690
1.194	3.078	-.06720	-.06210	.00570	-.01050	-.02280	.01430	.65550	569.50000	-.00900
1.194	5.109	-.05920	-.09150	.00790	-.01520	-.02230	.01540	.65300	569.50000	-.01050
1.200	7.147	-.06270	-.12610	-.00160	-.01630	-.02490	.01740	.65430	569.50000	-.01240
1.201	9.188	-.06130	-.15770	-.00740	-.01930	-.02850	.01950	.65400	569.50000	-.01420
	GRADIENT	.00074	-.01665	-.00113	-.00159	-.00105	.00120	-.00022	.00000	-.00095

ARC 11-747 Q453A B C M F M V NOM. RN/L

(UEJ32) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BOFLAP = -11.7000  
 SPDRK = 25.0000 RUDPR = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 359/ 0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.598	-4.943	.06580	.03230	.02380	-.01490	-.01710	.01220	.97070	479.70000	-.00700
.598	-2.958	.06890	-.00610	.02660	-.01680	-.03410	.01930	.96190	479.70000	-.01170
.596	.019	.06980	-.00540	.02800	-.01790	-.05310	.02710	.93420	479.70000	-.01720
.596	3.101	.06670	-.00790	.03150	-.01970	-.07570	.03680	.91860	479.70000	-.02410
.601	5.157	.06580	-.01200	.03320	-.02040	-.09150	.04270	.91700	479.70000	-.02810
.599	6.732	.06440	-.01640	.03220	-.01920	-.09880	.04540	.92420	479.70000	-.02970
GRADIENT		.00009	-.01726	.00090	-.00056	-.00716	.00300	-.00681	-.00000	-.00209

RUN NO. 259/ 0 RN/L = 4.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.802	-4.964	.07750	.04400	.01920	-.01340	.09120	-.01870	.97150	646.20000	.00710
.799	-2.972	.08180	.00250	.02360	-.01610	.11880	-.02330	.96490	646.20000	.00650
.796	-.980	.08340	-.03100	.02480	-.01670	.13140	-.02530	.95240	646.20000	.00560
.801	.016	.08450	-.00510	.02590	-.01710	.13820	-.02630	.94540	646.20000	.00500
.796	1.050	.08370	-.06820	.02720	-.01760	.14670	-.02770	.94320	646.20000	.00460
.799	3.109	.08220	-.01050	.03030	-.01890	.16620	-.03080	.93880	646.20000	.00360
.801	5.176	.07940	-.01480	.03510	-.02120	.19650	-.03610	.93260	646.20000	.00320
.799	6.744	.07920	-.01740	.03540	-.02070	.19780	-.03580	.93510	646.20000	.00230
GRADIENT		.00260	-.01832	.00129	-.00062	.00879	-.00141	-.00440	-.00000	-.00044

RUN NO. 356/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.901	-4.955	.08010	.05530	.01400	-.01280	-.000190	.00550	1.02100	614.90000	-.00230
.899	-2.975	.08520	.01070	.02000	-.01480	-.02320	.01450	1.01600	614.90000	-.00820
.902	.017	.08920	-.04760	.02450	-.01590	-.04530	.02370	.99640	614.90000	-.01470
.899	3.113	.08800	-.01080	.03180	-.01770	-.07240	.03550	.98330	614.90000	-.02300
.899	5.173	.08420	-.01570	.03540	-.01810	-.09070	.04280	.97140	614.90000	-.02780
.899	6.703	.08290	-.01790	.03600	-.01700	-.09950	.04600	.96730	614.90000	-.02970
GRADIENT		.00197	-.02042	.00211	-.00057	-.00855	.00363	-.00492	.00000	-.00252



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(AEJ032) (12 MAR 74)

REFERENCE DATA

SREF = 2.4215 SQ.FT.  
LREF = 14.2440 IN.  
BREF = 28.1004 IN.  
SCALE = .0300 SCALE

ALPHA = .000 ELEVON = .000  
AILRON = .000 BDELAP = -11.700  
SPDRK = 25.000 RUDDER = -25.000  
ELEV-L = .000 ELEV-R = .000

PARAMETRIC DATA

RUN NO. 253 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.053	-4.964	.07160	.05020	.01780	-.00840	.09480	-.01960	1.40950	629.20000	.00840
1.053	-2.977	.07560	.00940	.02240	-.01350	.12970	-.02590	1.38500	629.20000	.00840
1.054	-.985	.07900	-.02540	.02470	-.01650	.15250	-.02990	1.34300	629.20000	.00790
1.052	.010	.08020	-.04530	.02550	-.01820	.15980	-.03100	1.28000	629.20000	.00740
1.052	1.044	.08020	-.06220	.02640	-.01950	.16710	-.03200	1.27800	629.20000	.00680
1.053	3.104	.07780	-.09980	.02850	-.02270	.18890	-.03570	1.24900	629.20000	.00610
1.047	5.174	.07450	-.14090	.03230	-.02650	.21810	-.04090	1.22800	629.20000	.00570
1.050	6.689	.07470	-.16720	.03400	-.02870	.23620	-.04400	1.23500	629.20000	.00550
	GRADIENT	.07289	-.01847	.00126	-.00175	.01123	-.00191	-.02182	.00000	-.00030

RUN NO. 354 / 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.200	-4.955	.05590	.05160	.01660	-.00780	.00250	.00420	1.68200	572.70000	-.00120
1.202	-2.971	.05920	.01220	.02070	-.01180	.01950	.01340	1.58300	572.70000	-.00710
1.201	.011	.06180	-.04150	.02380	-.01610	-.04260	.02360	1.48200	572.70000	-.01420
1.198	3.105	.06260	-.09520	.02660	-.01950	-.06560	.03350	1.39900	572.70000	-.02110
1.199	5.175	.06210	-.13210	.02870	-.02180	-.08190	.04070	1.32900	572.70000	-.02600
1.197	6.687	.06300	-.15880	.02980	-.02410	-.09400	.04610	1.31300	572.70000	-.02950
	GRADIENT	.07281	-.01814	.00120	-.00143	-.00810	.00358	-.03455	.00000	-.00245

DATE 06 JUL 74

## TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F M V NOM. RN/L

(AEJ033) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 ALLRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 263/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.601	-5.024	.06230	.02850	.02250	-.00740	.00970	-.01980	.57920	484.30000	.00630
.598	-3.008	.06260	-.00550	.02500	-.01270	.12130	-.02350	.57870	484.30000	.00590
.597	-.986	.06180	-.03740	.02620	-.01670	.13450	-.02570	.57890	484.30000	.00520
.598	.017	.06200	-.05410	.02680	-.01880	.14030	-.02680	.57860	484.30000	.00490
.598	1.034	.06110	-.06800	.02690	-.02180	.14560	-.02750	.57980	484.30000	.00460
.598	3.032	.05960	-.10250	.02870	-.02390	.15790	-.02940	.58090	484.30000	.00360
.599	5.074	.05640	-.13790	.03080	-.02770	.17440	-.03210	.58350	484.30000	.00270
.599	7.099	.05520	-.16970	.03020	-.02960	.17270	-.03110	.58440	484.30000	.00140
.600	9.125	.05710	-.19180	.02600	-.02960	.15780	-.02770	.58260	484.30000	.00020
GRADIENT		-.00248	-.01597	.00058	-.00186	.00599	-.00037	.00037	.00000	-.00037

RUN NO. 260/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.797	5.047	.06190	.03970	.02060	-.00700	.08890	-.01790	.58100	640.70000	.00650
.796	-3.015	.06450	.00310	.02220	-.01110	.11010	-.02150	.57880	640.70000	.00600
.801	-.991	.06510	-.02950	.02280	-.01470	.12130	-.02330	.57730	640.70000	.00520
.797	.019	.06610	-.04920	.02380	-.01500	.12840	-.02450	.57800	640.70000	.00480
.799	1.040	.06590	-.06630	.02460	-.01600	.13630	-.02580	.57680	640.70000	.00450
.799	3.063	.06430	-.10160	.02680	-.02000	.15360	-.02870	.57760	640.70000	.00380
.796	5.100	.06090	-.14040	.02950	-.02440	.17470	-.03230	.58080	640.70000	.00310
.797	7.127	.05950	-.17630	.02990	-.02700	.18300	-.03330	.58200	640.70000	.00220
.800	9.164	.05680	-.20440	.02670	-.02760	.17270	-.03070	.58440	640.70000	.00090
GRADIENT		.00201	-.01732	.00077	-.00138	.00718	-.00119	-.00020	-.00000	-.00030

RUN NO. 357/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.901	-5.040	.05720	.04750	.01840	-.00350	-.01090	.00850	.58590	616.00000	-.00400
.901	-3.014	.05740	.00970	.01960	-.00730	-.01420	.01410	.58580	616.00000	-.00790
.899	.023	.05990	-.04420	.02150	-.01280	-.04100	-.02150	.58270	616.00000	-.01330
.900	3.068	.05720	-.10120	.02500	-.01970	-.05550	.03000	.58550	616.00000	-.01960
.899	5.101	.05740	-.14080	.02760	-.02480	-.07490	.03670	.58490	616.00000	-.02430
.900	7.132	.05730	-.17520	.02670	-.02710	-.08450	.04020	.58480	616.00000	-.02560
GRADIENT		-.00203	-.01823	.00089	-.00204	-.00520	.00261	-.00005	.00000	-.00132



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS5A

ARC 11-747 QAS5A B C M F W V NOM. RN/L

(AEJ533) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

PARAMETRIC DATA

RUN NO. 254/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.051	-5.044	.00170	.04460	.01780	-.00370	.06500	-.01730	.63160	628.70000	.00720
1.051	-3.012	-.00180	.00880	.02050	-.00780	.10900	-.02160	.63390	628.70000	.00790
1.053	-1.000	-.00470	-.02260	.02140	-.01230	.12770	-.02490	.63580	628.70000	.00660
1.052	.018	-.00420	-.04110	.02270	-.01380	.13880	-.02690	.63550	628.70000	.00650
1.052	1.028	-.00370	-.05820	.02390	-.01570	.15000	-.02830	.63510	628.70000	.00640
1.050	3.061	-.00280	-.09280	.02670	-.01990	.17240	-.03280	.63460	628.70000	.00610
1.049	5.087	.00010	-.13120	.02960	-.02450	.19980	-.03780	.63270	628.70000	.00590
1.048	7.117	.00510	-.16710	.03130	-.02880	.22360	-.04200	.62930	628.70000	.00550
1.050	9.149	.00720	-.19850	.03040	-.03150	.23300	-.04340	.62790	628.70000	.00490
	GRADIENT	-.00010	-.01681	.00104	-.00196	.01050	-.00186	.00007	-.00000	-.00014

RUN NO. 251/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.199	-5.035	-.01920	.04420	.01820	-.00320	.07500	-.01320	.64540	569.50000	.00640
1.200	-3.011	-.01980	.01050	.01960	-.00720	.10320	-.02460	.64590	569.50000	.00690
1.201	-.991	-.02160	-.02070	.02030	-.01210	.12410	-.02430	.64710	569.50000	.00670
1.204	.016	-.02260	-.03630	.02060	-.01400	.13290	-.02580	.64790	569.50000	.00660
1.204	1.029	-.02390	-.05210	.02100	-.01560	.14210	-.02740	.64860	569.50000	.00640
1.203	3.054	-.02250	-.08500	.02260	-.01800	.16150	-.03090	.64770	569.50000	.00610
1.200	5.084	-.01980	-.11800	.02360	-.02130	.18340	-.03470	.64610	569.50000	.00570
1.196	7.112	-.01470	-.15560	.02430	-.02620	.20740	-.03910	.64270	569.50000	.00560
1.195	9.135	-.01320	-.18330	.02260	-.02800	.22490	-.04210	.64180	569.50000	.00540
	GRADIENT	-.00051	-.01573	.00048	-.00178	.00954	-.00168	.00034	-.00000	-.00013

ARC 11-747 0453A B C M F M V NM. RN/L

(AEJ034) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 ALLRON = .0000 BCFAP = -11.7000  
 SPDRK = 25.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 361/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.597	-5.013	.03840	.04320	.01870	-.00390	-.01890	.01150	.61830	476.50000	-.00570
.599	-2.998	.03860	.04450	.02140	-.00080	-.03380	.01840	.61820	476.50000	-.01070
.599	.012	.03850	-.04980	.02340	-.01410	-.05010	.02570	.61830	476.50000	-.01610
.597	3.058	.03720	-.05550	.02930	-.02040	-.06610	.03270	.61870	476.50000	-.02140
.597	5.081	.03780	-.04510	.03300	-.02610	-.08120	.03940	.61840	476.50000	-.02630
.598	7.116	.03480	-.06940	.02920	-.02730	-.08530	.04020	.61950	476.50000	-.02680
GRADIENT		-.02423	-.01818	.00130	-.00192	-.00533	.00236	.00008	.00000	-.00177

RUN NO. 261/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.799	-5.060	.05920	.04640	.03240	-.00640	.07140	-.01320	.60930	642.10000	.00390
.797	-3.022	.06260	.00350	.02910	-.01070	.10520	-.02000	.60780	642.10000	.00500
.799	-.905	.06370	-.03660	.02570	-.01360	.12510	-.02390	.60730	642.10000	.00550
.798	.022	.06300	-.06470	.02280	-.01510	.13550	-.02800	.60750	642.10000	.00570
.799	1.046	.06270	-.07240	.02180	-.01740	.14510	-.02770	.60760	642.10000	.00570
.798	3.091	.06200	-.06580	.01840	-.02190	.16800	-.03220	.60780	642.10000	.00590
.798	5.131	.05940	-.04030	.01540	-.02560	.19410	-.03740	.60880	642.10000	.00630
.798	7.175	.05770	-.06590	.00850	-.02740	.19530	-.03780	.60940	642.10000	.00610
.799	9.226	.05470	-.09870	.00090	-.02610	.19470	-.03750	.61060	642.10000	.00570
GRADIENT		-.02014	-.01800	-.00174	-.00184	.01023	-.00138	.00001	-.00000	.00014

RUN NO. 358/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.071	.06050	.04250	.04030	-.00280	-.04170	.01550	.60860	616.30000	-.00360
.900	-3.035	.05540	.00390	.03250	-.00710	-.04030	.01990	.61050	616.30000	-.01120
.901	.017	.05250	-.04770	.02250	-.01190	-.04320	.02280	.61200	616.30000	-.01430
.903	3.086	.05280	-.03700	.01240	-.01790	-.04580	.02550	.61180	616.30000	-.01660
.902	5.129	.05340	-.02430	.00530	-.02190	-.04480	.02610	.61150	616.30000	-.01790
.899	7.181	.05360	-.04970	-.00500	-.02250	-.04610	.02410	.61140	616.30000	-.01700
GRADIENT		-.02442	-.01648	-.00328	-.00176	-.00090	.00091	.00016	.00000	-.00088

TABULATED SOURCE DATA - QAS3A

DATE 06 JUL 74

(AEJ034) (12 MAR 74)

ARC 11-747 QAS3A B C M F W V NOM. RM/L

PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 ATLRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 255/0 RM/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
1.050	-5.050	-0.3470	.05180	.02740	.00020	.06850	-.01260	.64410	628.40000	.00360
1.053	-3.024	-0.3756	.02020	.02350	-.00430	.09360	-.01770	.64500	628.40000	.00470
1.050	-1.024	-0.4480	-.01120	.01960	-.01230	.11770	-.02260	.64710	628.40000	.00580
1.032	.015	-.04170	-.03060	.01940	-.01370	.13410	-.02590	.64820	628.40000	.00650
1.050	1.036	-.03880	-.05230	.01980	-.01500	.15060	-.02920	.64530	628.40000	.00720
1.047	3.072	-.03150	-.09180	.01930	-.01920	.17540	-.03420	.64310	628.40000	.00800
1.046	5.115	-.02820	-.12.80	.01490	-.02260	.19610	-.03850	.64140	628.40000	.00860
1.036	7.158	-.02440	-.15010	.01010	-.02530	.21070	-.04160	.64090	628.40000	.00880
1.050	9.190	-.02220	-.17530	.00570	-.02560	.20980	-.04160	.64020	628.40000	.00860
	GRADIENT	.00118	-.01855	-.00751	-.00233	.01369	-.00276	-.00037	.00000	.00056

RUN NO. 355/0 RM/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYV	XCP/L	Q	CBLV
1.199	-5.041	-.05150	.05330	.02670	-.00300	-.03410	.01550	.65030	573.10000	-.00770
1.201	-3.020	-.05540	.01760	.02490	-.00500	-.03440	.01710	.65150	573.10000	-.00930
1.197	.014	-.05540	-.03310	.01990	-.00950	-.03700	.02050	.65140	573.10000	-.01190
1.197	3.074	-.05190	-.08290	.01490	-.01500	-.03870	.02300	.65040	573.10000	-.01430
1.198	5.111	-.04810	-.11410	.01070	-.01760	-.03870	.02370	.64930	573.10000	-.01560
1.198	7.152	-.04650	-.14260	.00540	-.02030	-.03620	.02360	.64890	573.10000	-.01630
	GRADIENT	.00058	-.01649	-.00149	-.00164	-.00071	.00097	-.00018	.00000	-.00082

ARC 11-747 QMS3A B C M F W V NOM. RN/L

(AEJ035) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 ALLCON = .0000 BDFLAP = -11.700  
 SPBRK = 55.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 277 / 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLFWD	CT	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.596	-4.934	.07040	.06870	.00360	-.00350	.00500	-.01680	.92750	477.90000	.00070
.598	-2.953	.07350	.02740	.00810	-.00650	-.02720	.00960	.91800	477.90000	-.00740
.601	-.964	.07460	-.00350	.01020	-.00750	-.00760	.02630	.90500	477.90000	-.01110
.598	.022	.07430	-.02230	.01040	-.00800	-.01060	.03480	.91670	477.90000	-.01520
.598	1.050	.07440	-.03550	.01120	-.00830	-.01260	.04340	.91700	477.90000	-.01920
.595	3.108	.07270	-.07450	.01350	-.00920	-.01830	.06220	.89890	477.90000	-.02890
.597	5.164	.07050	-.11350	.01690	-.01070	-.02510	.08550	.90190	477.90000	-.03880
.597	6.703	.06640	-.14100	.01880	-.01180	-.02910	.10180	.89990	477.90000	-.04610
GRADIENT		.00029	-.01760	.00114	-.00266	-.02815	.00956	-.00344	.00000	-.00345

RUN NO. 274 / 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLFWD	CT	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.600	-4.954	.08160	.07590	.00160	-.00310	.06660	-.02220	.94270	639.60000	.01120
.796	-2.961	.06520	.03080	.02720	-.00650	-.02420	.00860	.93920	639.60000	-.00280
.797	-.972	.06740	-.00370	.00950	-.00780	-.07860	.02720	.92590	639.60000	-.01150
.798	.025	.06770	-.02330	.01070	-.00820	-.10650	.03650	.92740	639.60000	-.01540
.795	1.050	.06730	-.04120	.01210	-.00930	-.13410	.04500	.92730	639.60000	-.02030
.800	3.121	.06720	-.07910	.01530	-.01020	-.19510	.06550	.92150	639.60000	-.03000
.799	5.180	.06390	-.11930	.01930	-.01160	-.26520	.09440	.91670	639.60000	-.04020
.797	6.733	.06100	-.14820	.02190	-.01270	-.31730	.10610	.92060	639.60000	-.04860
GRADIENT		.00059	-.01697	.00160	-.00381	-.02144	.01366	-.00273	.00000	-.00436

RUN NO. 271 / 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLFWD	CT	CYN	CBL	CYV	CNV	XCP/L	Q	CBLV
.901	-4.954	.08400	.06530	-.00240	-.00380	.00120	-.00720	.93410	615.40000	.01340
.902	-2.961	.09780	.02690	.00000	-.00690	-.01150	.01760	.92730	615.40000	-.00140
.902	-.972	.09410	-.00210	.00920	-.00840	-.00820	.02760	.93030	615.40000	-.01170
.901	.024	.09530	-.02220	.01070	-.00830	-.01070	.03670	.92950	615.40000	-.01600
.899	1.050	.09560	-.04160	.01210	-.00840	-.03370	.04570	.93180	615.40000	-.02020
.900	3.117	.09280	-.06370	.01710	-.00960	-.02560	.07010	.92630	615.40000	-.03160
.900	5.179	.08910	-.10290	.02270	-.01100	-.04540	.09560	.93360	615.40000	-.04300
.900	6.658	.08750	-.15860	.02580	-.01180	-.03390	.11170	.93210	615.40000	-.05110
GRADIENT		.00108	-.02066	.00229	-.00267	-.03434	.01166	-.00335	.00000	-.00540

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F M V NOM. RN/L

(AEJ035) ( 12 MAR 74 )

## REFERENCE DATA

SCRF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0000 SCALE

ALPHA = .0000 ELEWON = .0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 268/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CT	CYN	CBL	CYV	CYV	W	XCP/L	CBLV
1.051	-4.953	.07220	.07730	.00110	.00170	.07490	.02520	1.33500	628.70000	.01270
1.054	-2.963	.07410	.03440	.02660	.00340	.01700	.02620	1.32700	628.70000	.00140
1.053	-.970	.07810	.02070	.00910	.00710	.07770	.02640	1.27800	628.70000	.01120
1.053	.024	.07980	.02090	.01330	.02890	.11020	.03780	1.23100	628.70000	.01630
1.050	1.458	.07920	.03890	.01140	.01080	.14100	.04830	1.20800	628.70000	.02110
1.050	3.116	.07790	.07500	.01400	.01390	.20550	.07020	1.20800	628.70000	.03130
1.050	5.179	.07540	.11670	.01830	.01810	.28540	.09750	1.19200	628.70000	.04370
1.051	6.828	.07520	.14780	.02130	.02100	.34620	.11820	1.18200	628.70000	.05290
	GRADIENT	.00286	.01875	.00152	.00192	.03404	.01157	.01893	.00000	.00535

RUN NO. 265/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CT	CYN	CBL	CYV	CYV	W	XCP/L	CBLV
1.200	-4.947	.06010	.07760	.00140	.00370	.02630	.01070	1.55100	571.00000	.00780
1.197	-2.960	.06360	.03690	.00630	.00350	.00630	.00120	1.49100	571.00000	.00160
1.199	-.972	.06340	.02220	.00850	.00680	.07180	.02480	1.40400	571.00000	.01020
1.198	.025	.06560	.01770	.00980	.00810	.10510	.03610	1.33500	571.00000	.01500
1.199	1.058	.06550	.03540	.01090	.00960	.13640	.04670	1.30200	571.00000	.02030
1.199	3.111	.06340	.07190	.01340	.01220	.20310	.06950	1.30800	571.00000	.03080
1.199	5.175	.06480	.11160	.01660	.01530	.27830	.09520	1.26600	571.00000	.04240
1.200	6.749	.06520	.13880	.01820	.01740	.33140	.11330	1.24500	571.00000	.05050
	GRADIENT	.00264	.01847	.00145	.00159	.02996	.01036	.03176	.00000	.00493

ARC 11-747 QAS3A B C M F W V NDM. RN/L

(AEJ036) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDELAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 278/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.597	-5.017	.06650	.06500	.00280	.00370	-.04500	-.01500	.57420	478.50000	.00790
.599	-2.995	.06700	.02840	.006 0	-.00200	-.01900	.00690	.57340	478.50000	-.00210
.596	-.985	.06660	-.00440	.00800	-.00600	-.06490	.02230	.57310	478.50000	-.00940
.597	.026	.06620	-.02000	.00850	-.00820	-.08470	.02900	.57310	478.50000	-.01260
.598	1.034	.06550	-.03690	.00930	-.01040	-.10680	.03650	.57460	478.50000	-.01620
.59	3.056	.06460	-.07260	.01200	-.01430	-.15720	.05360	.57490	478.50000	-.02420
.599	5.083	.06230	-.10830	.01500	-.01800	-.21560	.07340	.57700	478.50000	-.03340
.598	7.105	.06840	-.14690	.01830	-.02250	-.28330	.09640	.58030	478.50000	-.04370
.596	9.124	.06740	-.18200	.02070	-.02660	-.34530	.11740	.58150	478.50000	-.05310
	GRADIENT	-.00041	-.01663	.00090	-.00205	-.02259	.00765	.00030	.00000	-.00362

RUN NO. 275/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.799	-5.038	.06600	.07160	.00320	.00350	-.05170	-.01730	.57690	639.10000	.00910
.798	-3.009	.06810	.03160	.00520	-.00140	-.01490	.00540	.57450	639.10000	-.00140
.800	-.986	.06930	-.00310	.00780	-.00600	-.06650	.02290	.57260	639.10000	-.00960
.800	.027	.07050	-.02180	.00880	-.00680	-.09140	.03130	.57100	639.10000	-.01360
.797	1.048	.06960	-.04080	.01020	-.00720	-.11350	.03890	.57240	639.10000	-.01720
.800	3.073	.06820	-.07610	.01260	-.01200	-.16810	.05740	.57320	639.10000	-.02590
.798	5.111	.06720	-.11530	.01540	-.01590	-.22660	.07730	.57380	639.10000	-.03500
.796	7.137	.06310	-.15360	.01810	-.02000	-.29050	.09900	.57780	639.10000	-.04470
	GRADIENT	.00690	-.19310	.02060	-.02390	-.35720	.12160	.58380	639.10000	-.05460
		.00003	-.01779	.00112	-.00163	-.02498	.00848	-.00019	-.00000	-.00400

RUN NO. 272/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.032	.06090	.07670	.00230	.00580	.05770	-.01950	.58200	615.40000	.01000
.899	-3.009	.06270	.03470	.00560	.00060	-.01050	.00380	.58020	615.40000	-.00070
.898	-.984	.06390	-.00450	.00780	-.00370	-.06540	.02250	.57850	615.40000	-.00950
.898	.025	.06330	-.02260	.00860	-.00580	-.09130	.03130	.57890	615.40000	-.01360
.899	1.043	.06340	-.04120	.00960	-.00770	-.11750	.04020	.57930	615.40000	-.01780
.900	3.078	.06170	-.07920	.01250	-.01230	-.17600	.06020	.58060	615.40000	-.02710
.898	5.105	.06280	-.11890	.01500	-.01760	-.23620	.08070	.57900	615.40000	-.03650
.900	7.136	.05900	-.15870	.01730	-.02200	-.29550	.10090	.58240	615.40000	-.04590
.898	9.169	.05410	-.20000	.01960	-.02580	-.35890	.12250	.58680	615.40000	-.05510
	GRADIENT	-.00017	-.01865	.00111	-.00210	-.02704	.00921	.00010	-.00000	-.00400

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(AEJ036) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 269/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
1.031	-5.028	-0.0130	.07200	.00160	.00570	.06240	-.02110	.63360	629.20000	.01090
1.033	-3.009	-0.0400	.03180	.00610	.00040	-.01310	.00470	.63340	629.20000	-.00090
1.033	-.988	-0.0460	-.00380	.00940	-.00440	-.07880	.02720	.63380	629.20000	-.01130
1.032	.023	-0.00590	-.02130	.01070	-.00670	-.10930	.03760	.63660	629.20000	-.01610
1.033	1.032	-0.00570	-.03810	.01220	-.00880	-.13910	.04780	.63650	629.20000	-.02070
1.033	3.069	-0.00580	-.07480	.01520	-.01360	-.20260	.06950	.61560	629.20000	-.03070
1.032	5.085	-0.0180	-.11380	.01890	-.01820	-.27090	.09280	.63390	629.20000	-.04140
1.030	7.112	-0.0440	-.14930	.02050	-.02220	-.32840	.11240	.62980	629.20000	-.05030
1.049	9.140	-0.0460	-.18280	.02180	-.02690	-.38550	.13180	.62960	629.20000	-.05870
	GRADIENT	-.00032	-.01748	.00149	-.00229	-.03104	.01061	.00021	-.00000	-.00488

RUN NO. 266/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
1.200	-5.028	-0.02120	.06750	.00480	.00450	.04480	-.01510	.64690	571.00000	.00820
1.201	-3.013	-0.02130	.03160	.00580	.00030	-.01720	.00610	.64700	571.00000	-.00160
1.198	-.987	-0.02170	.00450	.00780	-.00470	-.07050	.02440	.64730	571.00000	-.00090
1.201	.026	-0.02220	-.01530	.00850	-.00670	-.09700	.03340	.64760	571.00000	-.01410
1.201	1.041	-0.02310	-.03200	.00930	-.00850	-.12470	.04290	.64810	571.00000	-.01840
1.202	3.063	-0.02320	-.06640	.01160	-.01160	-.18070	.06200	.64830	571.00000	-.02720
1.198	5.088	-0.02100	-.10330	.01360	-.01540	-.24170	.08280	.64690	571.00000	-.03690
1.197	7.117	-0.01580	-.13860	.01520	-.01960	-.30870	.10380	.64350	571.00000	-.04720
1.197	9.146	-0.01410	-.16950	.01420	-.02280	-.35760	.12250	.64240	571.00000	-.05460
	GRADIENT	-.00035	-.01612	.00078	-.00195	-.02689	.00919	.00023	-.00000	-.00421

DATE 08 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C F W V NDM. RN/L

(AEJ037) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .03100 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 279/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.598	-5.087	.04260	.07800	-.00020	.00740	.05710	-.01930	.61650	480.20000	.01010
.597	-2.934	.04230	.04100	.00330	.00230	-.01090	.00390	.61660	480.20000	-.00070
.596	-.922	.04160	.00160	.00680	-.00280	-.06350	.02170	.61690	480.20000	-.00910
.597	.924	.04130	-.01670	.00760	-.00540	-.08650	.02960	.61720	480.20000	-.01280
.598	1.037	.04130	-.03580	.00920	-.00800	-.10810	.03630	.61710	480.20000	-.01630
.597	3.070	.04230	-.07480	.01260	-.01330	-.15920	.05440	.61650	480.20000	-.02460
.599	5.092	.04570	-.11100	.01570	-.01890	-.21470	.07330	.61690	480.20000	-.03350
.598	7.122	.04020	-.14720	.01800	-.02300	-.27590	.09410	.61720	480.20000	-.04300
.597	9.144	.02980	-.18380	.02130	-.02850	-.34360	.11710	.62140	480.20000	-.05710
GRADIENT		-.00201	-.01904	.00150	-.00257	-.02422	.00825	-.00001	-.00000	-.00390

RUN NO. 276/0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.799	-5.053	.06350	.07800	.01450	.00310	.02680	-.00950	.60740	639.10000	.00580
.801	-3.015	.06410	.03520	.01190	-.00120	-.01960	.00660	.60700	639.10000	-.00180
.798	-.982	.06440	-.00740	.00830	-.00490	-.06290	.02150	.60690	639.10000	-.00800
.802	.030	.06530	-.02610	.00700	-.00640	-.08700	.02990	.60640	639.10000	-.01270
.798	1.054	.06530	-.04490	.00580	-.00880	-.10800	.03710	.60640	639.10000	-.01620
.799	3.099	.06470	-.07700	.00320	-.01350	-.15070	.05180	.60650	639.10000	-.02320
.799	5.137	.06240	-.11040	-.00030	-.01740	-.18530	.06390	.60740	639.10000	-.02910
.802	7.175	.05830	-.14260	.00500	-.02080	-.21580	.07450	.60890	639.10000	-.03410
.800	9.219	.05490	-.18120	.00810	-.02000	-.26920	.09290	.61030	639.10000	-.04200
GRADIENT		.00013	-.01637	.00127	-.00200	-.02155	.00743	-.00000	.00000	-.00351

RUN NO. 273/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.801	-5.058	.06490	.06690	.02490	.00710	-.02110	.00660	.60640	615.50000	-.00150
.899	-3.023	.05860	.03050	.01660	.00020	-.04250	.01430	.60500	615.50000	-.00520
.902	-.987	.05650	-.00370	.01080	-.00390	-.06820	.02330	.61020	615.50000	-.00970
.899	.030	.05660	-.02470	.00780	-.00520	-.08680	.02930	.61010	615.50000	-.01260
.898	1.056	.05800	-.04290	.00590	-.00690	-.10380	.03570	.60940	615.50000	-.01550
.900	3.099	.05720	-.07290	-.00120	-.01150	-.13090	.04320	.60950	615.50000	-.02020
.897	5.137	.05650	-.10180	.00700	-.01590	-.15700	.05430	.60940	615.50000	-.02430
.894	7.182	.05510	-.13080	.01530	-.01880	-.18240	.05640	.61040	615.50000	-.02910
.902	9.226	.05220	-.16610	.02180	-.02050	-.21890	.06490	.61150	615.50000	-.03570
GRADIENT		-.00013	-.01702	-.00290	-.00184	-.01474	.00515	.00000	-.00000	-.00249



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOM. RN/L

(AEJ037) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEWON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDPRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 275/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.051	-5.045	-.03220	.07690	.01300	.00880	.00610	-.00270	.64330	628.60000	.00260
1.049	-5.015	-.03760	.04090	.01030	.00350	-.04200	.01410	.64510	628.60000	-.00510
1.052	-.994	-.04600	.00780	.00800	-.00560	-.08700	.02990	.64760	628.60000	-.01230
1.049	-.022	-.04190	-.01230	.00830	-.00710	-.11360	.03910	.64630	628.60000	-.01650
1.049	1.045	-.03950	-.03610	.00970	-.00870	-.14180	.04890	.64560	628.60000	-.02090
1.047	3.081	-.03090	-.07500	.00940	-.01390	-.18680	.06460	.64290	628.60000	-.02800
1.048	5.123	-.02870	-.10590	.00570	-.01700	-.21330	.07380	.64230	628.60000	-.03270
1.048	7.157	-.02380	-.13550	.00120	-.02040	-.23200	.08040	.64080	628.60000	-.03630
1.045	9.201	-.02300	-.15700	-.00750	-.02170	-.24010	.08330	.64050	628.60000	-.03790
	GRADIENT	.00131	-.01927	-.00005	-.00272	-.02405	.00839	-.00042	-.00000	-.00380

RUN NO. 267/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.199	-5.033	-.05250	.07090	.01550	.00380	-.01680	.00510	.65070	570.10000	-.00100
1.203	-3.019	-.05760	.03940	.01130	.00010	-.04420	.01490	.65240	570.10000	-.00570
1.198	-.998	-.05590	.00300	.01050	-.00260	-.08500	.02910	.65180	570.10000	-.01200
1.197	.018	-.05710	-.01270	.00900	-.00430	-.10150	.03490	.65220	570.10000	-.01460
1.195	1.044	-.05660	-.03100	.00800	-.00660	-.12050	.04160	.65200	570.10000	-.01760
1.192	3.077	-.05150	-.06620	.00590	-.01030	-.16010	.05550	.65040	570.10000	-.02380
1.194	5.111	-.04450	-.09360	.00070	-.01490	-.18070	.06270	.64820	570.10000	-.02770
1.198	7.145	-.04800	-.12590	-.00280	-.01540	-.19130	.06650	.64950	570.10000	-.02990
1.200	9.188	-.04610	-.15470	-.00920	-.01800	-.20960	.07290	.64890	570.10000	-.03310
	GRADIENT	.00087	-.01725	-.00092	-.00173	-.01885	.00661	-.00029	.00000	-.00295

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## TABULATED SOURCE DATA - 0433A

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ARC 11-747 0433A B C H F MI V NOM. RN/L

(AEJ038) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPDBRK = 8" RODR = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 201/0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.598	-1.631	.10720	-.00100	.00000	-.00200	-.00050	-.00010	.86760	479.70000	.00020
.600	.091	.10750	-.00210	.00000	-.00200	-.00130	-.00020	.93230	479.70000	.00000
.600	3.038	.09960	-.00010	-.00030	-.00230	-.00010	-.00020	-1.04100	479.70000	.00030
.597	6.035	.09760	.00040	-.00080	-.00280	-.00020	-.00020	.42420	479.70000	.00030
.596	9.034	.09290	.00000	-.00070	-.00340	-.00040	-.00010	.52990	479.70000	.00020
.601	12.120	.09100	-.00130	-.00030	-.00320	-.00060	-.00010	.56530	479.70000	.00020
.598	15.110	.08240	-.00060	-.00090	-.00150	-.00120	.00020	.58670	479.70000	.00000
.596	18.260	.07620	.00180	-.00170	-.00230	-.00130	.00020	.59880	479.70000	.00000
.597	21.240	.06930	.00240	-.00140	-.00140	-.00090	.00010	.60720	479.70000	.00010
.598	24.260	.06200	.00140	.00050	-.00320	-.00090	.00000	.60280	479.70000	.00020
.598	27.210	.15130	.00070	-.00220	.00400	-.00020	-.00020	.58200	479.70000	.00030
GRADIENT		-.00020	.00036	-.00009	-.00009	.00019	-.00006	-.55293	.00000	.00005

RUN NO. 197/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.798	-1.656	.11710	.00160	-.00050	-.00210	-.00040	-.00010	.88440	638.10000	.00020
.798	.102	.11640	.00080	-.00070	-.00230	-.00080	.00000	.94970	638.10000	.00000
.799	3.085	.11470	.00120	-.00080	-.00270	-.00030	-.00010	-1.34600	638.10000	.00020
.800	6.065	.10780	.00030	-.00070	-.00320	-.00050	-.00010	.41880	638.10000	.00010
.800	9.084	.09830	-.00290	-.00020	-.00210	-.00020	-.00030	.52960	638.10000	.00020
.801	12.110	.09730	-.00140	-.00150	-.00190	.00050	-.00040	.55980	638.10000	.00030
.802	15.190	.08770	-.00290	-.00240	-.00210	.00010	-.00020	.58240	638.10000	.00030
.799	18.230	.08430	-.00460	-.00250	-.00250	.00120	-.00060	.59420	638.10000	.00050
.799	21.240	.09940	-.00660	-.00340	-.00110	.00020	-.00090	.59350	638.10000	.00080
.796	24.240	.14660	-.00480	-.00340	-.00350	.00370	-.00170	.57880	638.10000	.00130
.801	27.200	.18730	.00640	-.00420	-.00450	.00520	-.00250	.56460	638.10000	.00190
GRADIENT		-.00062	-.00004	-.00007	-.00015	.00007	-.00001	-.64524	.00000	.00002

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NDM, RN/L

(AEJ038) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 193/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.903	-6.51	.13250	.00100	-.00070	-.00230	-.00060	-.00010	.91280	617.60000	.00010
.904	.100	.12940	.00040	-.00070	-.00250	-.00080	.00000	.99640	617.60000	.00010
.905	3.116	.11690	.00190	-.00090	-.00310	.00000	-.00020	-.33940	617.60000	.00020
.901	6.121	.10750	.00000	-.00100	-.00330	-.00020	-.00020	.43970	617.60000	.00020
.902	9.128	.09420	-.00020	-.00110	-.00140	.00010	-.00020	.53870	617.60000	.00020
.903	12.150	.08510	-.00120	-.00200	-.00080	.00000	-.00030	.57210	617.60000	.00030
.897	15.180	.07220	-.00230	-.00170	-.00100	.00000	-.00050	.59300	617.60000	.00040
.902	18.240	.07310	-.00340	-.00220	-.00050	.00020	-.00100	.60000	617.60000	.00040
.899	21.230	.06260	-.00220	-.00230	-.00030	.00000	-.00090	.59630	617.60000	.00080
.897	24.330	.14860	-.00210	-.00230	-.00380	.00030	-.00090	.57840	617.60000	.00070
.899	27.220	.17640	.00210	-.00450	-.00090	.00010	-.00260	.57180	617.60000	.00190
GRADIENT	-.00414		.00031	-.00006	-.00021	.00019	-.00004	-.36403	.00000	.00003

RUN NO. 189/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.054	-6.19	.11540	.00110	-.00050	-.00240	-.00060	-.00010	1.02800	629.90000	.00020
1.050	.069	.10610	-.00010	-.00050	-.00240	-.00130	.00020	1.23400	629.90000	.00000
1.051	3.076	.06960	.00090	-.00070	-.00210	-.00070	.00000	.44580	629.90000	.00020
1.053	6.051	.03720	.00020	-.00080	-.00210	-.00110	.00010	.59030	629.90000	.00010
1.045	9.081	.02360	-.00040	-.00050	-.00120	.00010	.00010	.61490	629.90000	.00010
1.051	12.100	.01460	-.00030	-.00090	.00000	.00010	.00050	.62450	629.90000	-.00020
1.050	15.160	.00530	.00190	-.00090	.00000	.00010	.00010	.63040	629.90000	.00010
1.052	18.230	-.00540	.00700	-.00280	.00060	-.00040	-.00020	.63470	629.90000	.00030
1.048	21.230	-.00390	.00320	-.00130	.00100	-.00130	.00020	.63400	629.90000	.00020
1.048	24.240	.00350	.00050	-.00010	.00020	-.00130	.00020	.62270	629.90000	.00000
1.050	27.210	.06700	.00580	-.00240	.00030	-.00050	-.00020	.61350	629.90000	.00030
GRADIENT	-.01232		.00006	-.00006	.00009	.00004	-.00000	-.18904	.00000	.00002

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(AEJ338) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 185/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.202	-.627	.10800	.00090	-.00020	-.00220	-.00110	.00010	1.02500	570.50000	.00000
1.201	.069	.09800	.00020	-.00010	-.00205	-.00130	.00020	1.30300	570.50000	.00000
1.205	3.061	.05610	.00090	-.00010	-.00170	-.00100	.00010	.47860	570.50000	.00010
1.203	5.134	.03370	.00020	-.00040	-.00160	-.00070	.00000	.58380	570.50000	.00010
1.198	6.048	.02480	-.00060	-.00040	-.00110	-.00010	.00020	.60350	570.50000	.00000
1.197	9.065	.00710	.00150	-.00080	-.00140	-.00140	.00020	.82720	570.50000	.00000
1.195	12.081	-.00220	-.00230	.00070	.00060	-.00160	.00030	.63400	570.50000	.00000
1.197	15.160	-.01800	.00250	-.00050	.00040	-.00130	.00020	.64090	570.50000	.00000
1.199	18.220	-.03150	.00330	-.00090	.00060	-.00160	.00020	.64480	570.50000	.00010
1.196	21.210	-.02290	.00640	-.00200	.00040	-.00100	.00000	.64040	570.50000	.00030
1.195	24.260	-.00420	.00290	-.00020	.00080	-.00200	.00050	.63400	570.50000	-.00010
1.196	27.170	.00700	.00630	-.00130	.00030	-.00150	.00030	.63000	570.50000	.00000
	GRADIENT	-.01405	.00007	.00002	.00013	.00005	-.00001	-.19187	.00000	.00003

ARC 11-747 QMS3A B C H F M V NOM. RN/L

(AEJ039) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILERON = .0000 BDFLAP = -11.7000  
 SPOILER = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 345/0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.599	-4.936	.09180	.09100	-.00690	.00200	.04070	-.01750	.97870	481.40000	.01210
.598	-2.945	.09480	.04870	-.00220	-.00070	.02020	-.00850	.97320	481.40000	.00610
.597	.030	.09670	-.00060	.00010	-.00210	-.00100	.00020	.95010	481.40000	.00020
.597	3.111	.09560	-.05110	.00210	-.00280	-.00200	.00820	.94830	481.40000	-.00550
.598	5.168	.09220	-.09080	.00680	-.00440	-.00390	.01670	.94560	481.40000	-.01130
.600	6.800	.08810	-.12180	.00970	-.00600	-.00550	.02360	.94590	481.40000	-.01570
	GRADIENT	.02246	-.01745	.00105	-.00256	-.00741	.00313	-.00420	-.00000	-.00214

RUN NO. 198/0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.800	-4.947	.11060	.09760	-.00940	.00250	.04380	-.01880	.96550	640.80000	.01290
.800	-2.959	.11500	.05470	-.00390	-.00040	.02230	-.00950	.96470	640.80000	.00670
.797	-.972	.11640	.01850	-.00110	-.00180	.00750	-.00320	.95580	640.80000	.00220
.797	.029	.11750	-.00110	-.00030	-.00210	-.00070	.00000	.94990	640.80000	.00010
.798	1.065	.11760	-.01800	.00090	-.00220	-.00090	.00260	.93310	640.80000	-.00170
.799	3.124	.11540	-.05450	.00340	-.00310	-.02190	.00890	.94830	640.80000	-.00620
.799	5.186	.11140	-.09640	.00860	-.00530	-.04280	.01800	.94040	640.80000	-.01220
.800	6.771	.10620	-.12780	.01210	-.00680	-.05770	.02470	.94020	640.80000	-.01640
	GRADIENT	.02264	-.01874	.00151	-.00265	-.00798	.00336	-.00238	-.00000	-.00232

RUN NO. 340/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.900	-4.947	.11720	.10690	-.01260	.00240	.04670	-.02030	1.01590	605.90000	.01380
.904	-2.961	.12350	.05980	-.00590	-.00060	.02440	-.01040	1.02400	605.90000	.00730
.902	.028	.12740	.00080	-.00070	-.00200	-.00060	.00000	1.00700	605.90000	.00030
.901	3.124	.12520	-.05910	.00460	-.00300	-.02410	.00990	.99820	605.90000	-.00660
.900	5.181	.11860	-.10380	.01080	-.00470	-.04540	.01930	.98120	605.90000	-.01300
.900	6.718	.11260	-.13850	.01540	-.00600	-.06190	.02660	.97530	605.90000	-.01760
	GRADIENT	.02096	-.02039	.00206	-.00262	-.00866	.00368	-.00265	-.00000	-.00249

ARC 11-747 QAS5A B C H F W V NOM. RN/L

(AEJ039) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SJ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1304 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILERON = .0000 BCLAP = -11.700  
 SPDRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

UN NO 190/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFND	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.052	-4.952	.10540	.10000	-.00920	.00740	.04210	-.01870	1.31000	628.90000	.01300
1.053	-2.962	.10520	.05500	-.00370	.00260	.02210	-.00970	1.30400	628.90000	.00680
1.053	-.971	.10430	.01760	-.00190	-.00100	.00710	-.00320	1.29000	628.90000	.00220
1.053	.023	.10670	-.00020	-.00020	-.00250	-.00010	-.00020	1.24300	628.90000	.00020
1.053	1.065	.10870	-.01730	.00040	-.00380	-.00080	.00310	1.23500	628.90000	-.00020
1.052	3.122	.10720	-.00560	.00250	-.00240	-.00240	.00990	1.21600	628.90000	-.00680
1.052	5.165	.10430	-.00570	.00710	-.01080	-.04190	.01810	1.20600	628.90000	-.01230
1.053	6.715	.10270	-.12570	.01030	-.01330	-.05700	.02480	1.19700	628.90000	-.01650
	GRADIENT	.00036	-.01885	.00037	-.00171	-.00810	.00347	-.01295	.00000	-.00240

RUN NO. 343/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFND	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.201	-4.945	.08930	.09450	-.00700	.00570	.04090	-.01850	1.49000	573.20000	.01270
1.201	-2.956	.09260	.05290	-.00280	.00160	.02140	-.00960	1.45700	573.20000	.00690
1.201	.028	.09460	-.00080	-.00010	-.00200	-.00100	.00010	1.38200	573.20000	.00030
1.196	3.120	.09480	-.05210	.00270	-.00510	-.02350	.00980	1.33200	573.20000	-.00640
1.204	5.178	.09280	-.09110	.00590	-.00810	-.04140	.01810	1.30000	573.20000	-.01210
1.201	6.794	.09100	-.12180	.00020	-.01080	-.05560	.02460	1.30300	573.20000	-.01630
	GRADIENT	.00065	-.01808	.00115	-.00130	-.00789	.00346	-.00202	-.00000	-.00234

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W Y NOM. RN/L

(AEJ040) ( 12 MAR 74 )

## REFERENCE DATA

SCRF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1904 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BCLAP = -11.700  
 SPCBRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 203/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-5.010	.09260	.08370	-.06570	.00830	.03340	-.01440	.54590	481.40000	.01010
.597	-2.993	.09190	.04770	-.00260	.00310	.01790	-.00770	.54690	481.40000	.00550
.597	-.981	.09240	.01460	-.00260	-.00130	.00480	-.00220	.54540	481.40000	.00180
.599	.031	.09240	-.00100	-.00040	-.00320	-.00050	-.00010	.54460	481.40000	.00020
.600	1.039	.09190	-.01800	.00200	-.00500	-.00520	.00190	.54610	481.40000	-.00120
.598	3.066	.09260	-.05040	.00200	-.00840	-.01710	.00700	.54680	481.40000	-.00480
.597	5.081	.08960	-.08740	.00520	-.01240	-.03280	.01370	.54790	481.40000	-.00950
.597	7.110	.08430	-.12800	.00930	-.01730	-.05190	.02210	.55310	481.40000	-.01490
.595	9.132	.07920	-.16750	.01310	-.02170	-.07240	.03060	.55820	481.40000	-.02030
	GRADIENT	-.00022	-.01619	.00071	-.00189	-.00569	.00239	.00002	-.00000	-.00168

RUN NO. 199/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.799	-5.034	.09480	.09080	-.00560	.00790	.03400	-.01500	.54770	639.80000	.01060
.799	-3.011	.09560	.05130	-.00310	.00320	.01820	-.00800	.54690	639.80000	.00580
.798	-.979	.09630	.01450	-.00130	-.00080	.00590	-.00250	.54490	639.80000	.00190
.800	.033	.09780	-.00280	-.00050	-.00140	.00010	-.00020	.54210	639.80000	.00020
.799	1.048	.09760	-.01980	.00200	-.00200	-.00510	.00200	.54390	639.80000	-.00130
.800	3.072	.09590	-.05380	.00220	-.00580	-.01820	.00760	.54500	639.80000	-.00530
.799	5.103	.09400	-.09300	.00530	-.00990	-.03410	.01450	.54620	639.80000	-.01090
.799	7.130	.08780	-.13400	.00890	-.01480	-.05310	.02290	.55300	639.80000	-.01550
.800	9.171	.07810	-.17570	.01270	-.01930	-.07290	.03150	.56270	639.80000	-.02080
	GRADIENT	.00011	-.01724	.00085	-.00139	-.00591	.00253	-.00033	.00000	-.00180

RUN NO. 341/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.031	.08960	.09530	-.00700	.01030	.03350	-.01520	.55570	607.20000	.01090
.900	-3.027	.09110	.05460	-.00380	.00550	.01870	-.00850	.55390	607.20000	.00630
.902	.030	.09010	-.00180	-.00120	-.00030	-.00010	-.00020	.55390	607.20000	.00040
.898	3.078	.08910	.00330	-.00130	-.00070	-.00180	.0010	.55520	607.20000	-.00560
.900	5.103	.08910	-.09600	.00430	-.01170	-.03370	.01480	.55410	607.20000	-.01030
.902	7.137	.08290	-.13650	.00750	-.01640	-.05090	.02230	.55990	607.20000	-.01520
	GRADIENT	-.00033	-.01776	.00084	-.00200	-.00613	.00273	-.00021	.00000	-.00196

ARC 11-747 0A53A B C H F M V NOM, RN/L

(AEJ040) ( 12 MAR 74 )

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 191/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.050	-5.033	.02910	.09120	-.00700	.01050	.03350	-.01560	.61270	628.40000	.01110
1.051	-5.006	.02470	.05190	-.00340	.00590	.01810	-.00860	.61590	628.40000	.00620
1.049	-.984	.02300	.01630	-.00080	.00160	.00510	-.00260	.61690	628.40000	.00200
1.050	.028	.02160	-.00240	.00240	-.00020	-.00090	.00010	.61790	628.40000	.00010
1.052	1.038	.02160	-.01940	.00140	-.00190	-.00680	.00280	.61800	628.40000	-.00180
1.049	3.068	.02240	-.00400	.00430	-.00590	-.02080	.00900	.61740	628.40000	-.00610
1.047	5.103	.02690	-.00210	.00740	-.01060	-.03550	.01570	.61420	628.40000	-.01080
1.050	7.132	.02890	-.12890	.00380	-.01510	-.05130	.02300	.61290	628.40000	-.01570
1.048	9.154	.02720	-.16370	.01190	-.02010	-.06660	.03040	.61390	628.40000	-.02030
	GRADIENT	-.00241	-.01746	.00125	-.00192	-.01635	.00267	.00028	-.00000	-.00201

RUN NO. 187/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.202	-5.026	.00910	.08490	-.00370	.00960	.02990	-.01420	.62640	573.60000	.01000
1.198	-3.001	.00640	.05020	-.00200	.00560	.01650	-.00790	.62830	573.60000	.00570
1.198	-.981	.02260	.01770	-.00120	.00070	.00430	-.00240	.63090	573.60000	.00190
1.199	.032	.00280	.00180	-.00060	-.00110	-.00100	.00010	.63080	573.60000	.00020
1.201	1.043	.00100	-.01550	-.00020	-.00270	-.00640	.00260	.63210	573.60000	-.00150
1.202	3.068	.00210	-.04710	.00140	-.00550	-.01860	.00810	.63130	573.60000	-.00540
1.197	5.093	.00610	-.00110	.00330	-.00090	-.03180	.01420	.62850	573.60000	-.00980
1.200	7.122	.01010	-.11830	.00480	-.01390	-.04640	.02110	.62560	573.60000	-.01440
1.201	9.147	.00880	-.15130	.00480	-.01680	-.06050	.02770	.62650	573.60000	-.01870
	GRADIENT	-.00272	-.01604	.00055	-.00181	-.01573	.00262	.00050	-.00000	-.00181



ARC 11-747 QAS3A B C H F M V NOM. RN/L

(AEJ041) (12 MAR 74)

## REFERENCE DATA

SCRF = 2.4210 SQ-FT. RMGP = 32.3010 IN.  
 LECP = 14.2440 IN. YMGF = .0000 IN.  
 BRFP = 20.1004 IN. ZMGF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 ALLRON = .0000 BDFLAP = -11.7000  
 SPDRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 346/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFC	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-5.051	.06830	.09340	-.00710	.01010	.02820	-.01290	.61620	479.70000	.00960
.599	-2.940	.06680	.05910	-.00590	.00590	.01450	-.00690	.60700	479.70000	.00530
.598	.027	.06590	.00100	-.00100	.00050	-.00110	.00020	.60750	479.70000	-.00010
.597	3.060	.06760	-.05240	.00280	-.00600	-.01680	.00720	.60660	479.70000	-.00510
.600	5.094	.06920	-.00820	.00540	-.01300	-.02960	.01290	.60580	479.70000	-.00910
.598	7.120	.06370	-.12540	.00820	-.01630	-.04590	.02020	.60820	479.70000	-.01420
	GRADIENT	.00013	-.01841	.00144	-.00197	-.00517	.00233	-.00027	.00000	-.00172

RUN NO. 200/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFC	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.797	-5.043	.06070	.09240	.00750	.00480	.01360	-.00820	.59640	638.30000	.00630
.799	-3.021	.09110	.05470	.00270	.00260	.01020	-.00580	.59510	638.30000	.00450
.796	-.505	.09210	.01440	-.00060	-.00020	.00460	-.00240	.59470	638.30000	.00190
.799	.032	.09170	-.00510	-.00280	-.00130	.00100	-.00290	.59470	638.30000	.00060
.800	1.061	.09260	-.00240	-.00400	-.00340	-.00150	.00090	.59510	638.30000	-.00080
.798	3.091	.09050	-.00550	-.00730	-.00750	-.00530	.00340	.59500	638.30000	-.00280
.799	5.190	.08760	-.00570	-.01130	-.01040	-.00960	.00610	.59630	638.30000	-.00530
.800	7.182	.08230	-.11740	-.01430	-.01480	-.01550	.00960	.59840	638.30000	-.00790
	GRADIENT	-.00900	-.19620	-.01740	-.01530	-.02710	.01560	.60140	638.30000	-.01170
		-.00016	-.01773	-.00164	-.00164	-.00258	.00149	.00001	-.00000	-.00120

RUN NO. 342/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFC	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.898	-5.056	.06050	.08530	.01910	.00630	-.00520	-.00100	.59660	610.40000	.00270
.903	-3.024	.06080	.05310	.00760	.00400	.00170	-.00260	.59820	610.40000	.00280
.901	.030	.06360	.00080	-.00310	.00040	.00160	-.00080	.59890	610.40000	.00080
.901	3.105	.06290	-.04930	-.01270	-.00450	.00030	.00110	.59940	610.40000	-.00140
.903	5.138	.06230	-.07340	-.01950	-.00880	.00020	.00160	.59920	610.40000	-.00230
.903	7.140	.07710	-.10710	-.02640	-.01050	.00190	.00260	.60150	610.40000	-.00360
	GRADIENT	-.00031	-.01671	-.00331	-.00139	-.00023	.00020	.00000	.00000	-.00069

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(AEJ041) (12 MAR 74)

## REFERENCE DATA

SACP = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 1.0000 IN.  
 BREF = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = 10000 SCALE

ALPHA = 20.000 ELEVW = 1.000  
 ALLRON = 1.000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = 1.000  
 ELEV-L = 1.000 ELEV-R = 1.000

## PARAMETRIC DATA

RUN NO. 192/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCF/L	Q	CBLV
1.031	-5.042	-0.0210	0.09500	0.0410	0.01260	0.00815	-0.0680	0.63340	628.30000	0.00580
1.031	-3.021	-0.01500	0.06370	0.02460	0.00870	0.00790	-0.00560	0.63440	628.30000	0.00440
1.031	-0.970	-0.01070	0.02890	0.00270	0.00210	0.00170	-0.00180	0.63630	628.30000	0.00160
1.050	0.023	-0.01220	0.01030	0.00350	0.00160	0.00030	-0.00050	0.63600	628.30000	0.00050
1.046	1.043	-0.01280	0.01760	0.00320	0.00240	0.00250	0.0130	0.63700	628.30000	-0.00090
1.046	3.090	-0.03000	0.05000	0.00480	0.00760	0.00880	0.0530	0.63370	628.30000	-0.00380
1.046	5.146	0.0170	0.04400	0.00240	0.01020	0.01040	0.0710	0.63210	628.30000	-0.00570
1.050	7.171	0.00090	0.11340	0.01020	0.01340	0.01010	0.0790	0.63240	628.30000	-0.00710
1.050	9.195	-0.0190	0.13760	0.01770	0.01580	0.01450	0.1060	0.63340	628.30000	-0.00920
1.046	GRADIENT	0.0019	0.01860	0.0029	0.00262	0.00267	0.00176	0.00007	0.00000	-0.00133

RUN NO. 344/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCF/L	Q	CBLV
1.050	-5.033	-0.0210	0.09210	0.0420	0.00890	0.00810	-0.00420	0.64030	573.20000	0.00420
1.054	-3.013	-0.01640	0.05490	0.0310	0.00690	0.00210	-0.00340	0.64180	573.20000	0.00290
1.052	0.027	-0.01960	0.0330	0.00270	0.00220	0.00220	0.00050	0.64290	573.20000	0.00010
1.100	3.082	-0.02680	0.04730	0.00480	0.00410	0.00560	0.0410	0.64190	573.20000	-0.00280
1.130	5.116	-0.02480	0.07950	0.00900	0.00640	0.00500	0.0510	0.64130	573.20000	-0.00440
1.203	7.157	-0.02390	0.11000	0.01230	0.00960	0.00510	0.0600	0.64110	573.20000	-0.00560
	GRADIENT	-0.0006	0.01677	0.00130	0.00179	0.00126	0.00123	0.00022	0.00000	-0.00094

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM, RN/L

(AEJ043) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 24.1004 IN.  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = 15.0000 BDFLAP = -11.7000  
 SFD8RK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 289/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFAD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-.644	.04300	-.03270	.01070	.04660	-.00730	.00290	.82710	480.80000	-.00130
.597	-.644	.04190	-.03430	.01080	.04730	-.00730	.00300	.91980	480.80000	-.00200
.599	1.109	.04180	-.03540	.01090	.04780	-.00710	.00290	11.05000	480.80000	-.00190
.599	1.614	.04150	-.03350	.01070	.04780	-.00710	.00290	-.06190	480.80000	-.00190
.598	3.597	.03990	-.03670	.01080	.04990	-.00730	.00300	.50870	480.80000	-.00200
.598	5.562	.03910	-.03740	.01080	.05040	-.00710	.00290	.56530	480.80000	-.00190
.599	7.634	.03780	-.04030	.01070	.05290	-.00790	.00320	.56890	480.80000	-.00210
.599	9.605	.03380	-.04210	.01070	.05490	-.00810	.00330	.60360	480.80000	-.00220
.599	12.630	.02980	-.04330	.01090	.05790	-.00920	.00380	.61440	480.80000	-.00250
.600	15.690	.03290	-.03810	.00810	.04790	-.00910	.00390	.61620	480.80000	-.00240
.599	18.720	.02860	-.03680	.00760	.04880	-.00970	.00390	.62090	480.80000	-.00250
.600	21.720	.03630	-.03560	.00620	.04460	-.00870	.00360	.61990	480.80000	-.00220
.599	24.730	.05620	-.01450	.00390	.03170	-.00440	.00180	.61130	480.80000	-.00110
.600	28.700	.14590	.02730	-.00430	.02480	-.00100	-.00080	.58260	480.80000	-.00100
GRADIENT		-.00267	-.00079	.00004	.00074	.00001	.00001	-.16848	.00000	-.00001

RUN NO. 288/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFAD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.798	-.664	.05330	-.03120	.01180	.04360	-.00650	.00260	.82540	641.20000	-.00180
.798	.079	.05110	-.03180	.01180	.04400	-.00650	.00270	.93160	641.20000	-.00190
.800	1.111	.04810	-.03160	.01160	.04450	-.00650	.00270	3.08700	641.20000	-.00180
.798	1.614	.04660	-.03140	.01150	.04460	-.00710	.00290	-.20630	641.20000	-.00190
.797	3.568	.04190	-.03220	.01130	.04620	-.00670	.00280	.51300	641.20000	-.00190
.798	5.570	.03450	-.03490	.01130	.04790	-.00760	.00310	.58150	641.20000	-.00210
.800	7.626	.02330	-.03540	.01070	.04740	-.00760	.00320	.60970	641.20000	-.00220
.799	9.612	.01990	-.03530	.01020	.04350	-.00710	.00300	.61720	641.20000	-.00210
.799	12.630	.02490	-.02980	.00850	.03670	-.00570	.00250	.61750	641.20000	-.00170
.797	15.700	.01630	-.02810	.00640	.03920	-.00540	.00250	.62480	641.20000	-.00160
.801	18.770	.02340	-.02210	.00300	.03870	-.00370	.00190	.62100	641.20000	-.00130
.799	21.770	.06010	-.00660	-.00040	.03140	-.00140	-.00040	.60990	641.20000	-.00040
.799	24.740	.12420	.03020	-.00940	.02100	-.00020	-.00040	.58730	641.20000	-.00310
.799	28.690	.15180	.04870	-.01180	.02410	-.00000	-.00040	.58030	641.20000	-.00320
GRADIENT		-.00270	-.00018	-.00013	.00060	-.00007	.00005	-.13593	.00000	-.00002

ARC 11-747 0453A B C H F M V NOM. RN/L

(AEJ043) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1024 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEWON = .000  
 AILRON = 15.000 BDPLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = -15.000

RUN NO. 287/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.900	-.669	.06710	-.03560	.01490	.04670	-.000760	.00310	.84930	614.60000	-.00210
.901	.068	.06290	-.03630	.01470	.04730	-.000840	.00350	.95840	614.60000	-.00230
.902	1.125	.05600	-.03500	.01400	.04790	-.000790	.00330	5.04900	614.60000	-.00220
.905	1.612	.05290	-.03550	.01380	.04770	-.000810	.00340	-.14580	614.60000	-.00220
.904	3.545	.03400	-.03650	.01350	.04730	-.000860	.00350	.55300	614.60000	-.00230
.899	5.569	.01690	-.03850	.01350	.04530	-.000880	.00360	.61090	614.60000	-.00240
.903	7.661	.00380	-.03620	.01280	.04170	-.000760	.00310	.62930	614.60000	-.00210
.899	9.616	.00290	-.02820	.00980	.03670	-.000560	.00240	.63250	614.60000	-.00160
.899	12.610	-.00420	-.01930	.00670	.03430	-.000370	.00170	.63510	614.60000	-.00110
.902	15.680	-.00010	-.01100	.00300	.03640	-.000220	.00120	.63740	614.60000	-.00080
.899	18.770	.00980	-.00340	-.00210	.03280	-.000100	-.00020	.62880	614.60000	-.00010
.901	21.770	.04280	.02370	-.00780	.02410	.000510	-.00230	.61680	614.60000	.00070
.905	24.720	.10530	.05300	-.01570	.01930	.01440	-.00640	.59580	614.60000	.00460
.906	28.670	.13280	.05870	-.01510	.02400	.00090	-.00510	.59010	614.60000	.00400
GRADIENT		-.06785	-.02013	-.00235	.00012	-.00017	.00206	-.12955	.00000	-.00003

RUN NO. 286/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.051	-.657	.06780	-.03130	.01460	.04520	-.000870	.00410	.90640	627.60000	-.00250
1.050	.056	.05780	-.03190	.01440	.04480	-.000920	.00420	1.12100	627.60000	-.00260
1.050	1.091	.04220	-.03020	.01380	.04400	-.000840	.00390	.16800	627.60000	-.00250
1.049	1.597	.03440	-.03110	.01360	.04370	-.000840	.00390	.44690	627.60000	-.00250
1.050	3.371	.00750	-.02900	.01250	.04270	-.000730	.00350	.61950	627.60000	-.00230
1.052	5.529	-.01400	-.02790	.01150	.04210	-.000720	.00360	.64810	627.60000	-.00230
1.052	7.809	-.03100	-.02680	.01140	.04190	-.000750	.00390	.65760	627.60000	-.00240
1.051	9.569	-.04560	-.02390	.01060	.04160	-.000740	.00390	.66160	627.60000	-.00240
1.050	12.590	-.05810	-.01940	.00830	.04090	-.000640	.00340	.66110	627.60000	-.00200
1.049	15.650	-.06160	-.00860	.00290	.04060	-.000380	.00190	.65760	627.60000	-.00120
1.048	18.700	-.06330	-.00900	-.00080	.03760	-.000140	.00070	.65440	627.60000	-.00040
1.049	21.710	-.05560	.01990	-.00900	.02970	.000310	-.00140	.64970	627.60000	.00110
1.052	24.750	-.00880	.02070	-.00830	.02480	.000280	-.00130	.63530	627.60000	.00120
1.050	28.670	.03540	.05060	-.01520	.01720	.000250	-.00130	.62300	627.60000	.00150
GRADIENT		-.01433	.00060	-.00051	-.00060	.00037	-.00016	-.10589	.00000	.00006

DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V NOM. RN/L

(AEJ043) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 ALLRON = 15.0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 285/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMP/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.201	-0.664	.04360	-0.01990	.01010	.03440	-0.00250	.00140	.89590	568.20000	-0.00040
1.199	.058	.03420	-0.01960	.00970	.03430	-0.00300	.00170	1.29000	568.20000	-0.00090
1.201	1.077	.02030	-0.01800	.00850	.03410	-0.00220	.00120	.48120	568.20000	-0.00060
1.202	1.066	.01390	-0.01800	.00820	.03420	-0.00210	.00110	.56720	568.20000	-0.00050
1.198	3.537	-0.00920	-0.01510	.00670	.03480	-0.00760	.00030	.64940	568.20000	-0.00010
1.199	5.526	-0.02880	-0.01390	.00540	.03550	.00040	-0.00010	.66630	568.20000	.00020
1.199	7.585	-0.04560	-0.01150	.00450	.03620	.00000	.00000	.67120	568.20000	.00010
1.201	9.567	-0.05860	-0.00970	.00360	.03590	.00000	.00000	.67170	568.20000	.00010
1.201	12.590	-0.07400	-0.00790	.00180	.03680	-0.00740	.00020	.66990	568.20000	.00000
1.198	15.660	-0.08530	-0.00310	-0.00200	.03480	-0.00760	.00040	.66750	568.20000	-0.00020
1.199	18.710	-0.08920	.00180	-0.00290	.03320	-0.00760	.00030	.66390	568.20000	-0.00010
1.198	21.710	-0.08140	.00680	-0.00540	.03080	-0.00010	.00020	.65820	568.20000	.00000
1.200	24.680	-0.05800	.01440	-0.00810	.02600	-0.00190	.00000	.64950	568.20000	.00080
1.198	28.660	-0.02740	.03710	-0.01420	.02010	.00440	-0.00290	.64000	568.20000	.00220
	GRADIENT	-0.01255	.00117	-0.00083	.00010	.00051	-0.00030	-0.11090	.00000	.00019

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

MACH = 2.4210 SQ.FT.  
 YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

ARC 11-747 0A53A B C H F M V NOM. RN/L

(AEJ046) (26 JUN 74 )

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 247/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.600	-5.004	.06760	.08370	-.00890	.02080	-.00330	.60650	482.60000	.00700	.00700
.598	-2.992	.06770	.04670	-.00410	.00660	-.00290	.60650	482.60000	.00250	.00250
.599	-.980	.06670	.00790	-.00270	-.00430	.00190	.60700	482.60000	-.00090	-.00090
.597	.025	.06600	-.00880	.00350	-.00270	.00380	.60720	482.60000	-.00230	-.00230
.599	1.042	.06530	-.02770	.00480	-.00310	.00600	.60710	482.60000	-.00400	-.00400
.599	3.069	.06740	-.06510	.00760	-.01020	.00190	.60650	482.60000	-.00770	-.00770
.597	5.094	.07120	-.09760	.00910	-.01430	.00590	.60480	482.60000	-.01140	-.01140
.599	7.117	.06460	-.13290	.01160	-.01910	.02270	.60720	482.60000	-.01600	-.01600
.600	9.149	.05140	-.17210	.01580	-.02390	.03180	.61270	482.60000	-.02180	-.02180
GRADIENT		-.00406	-.01836	.00126	-.00236	-.00506	.00225	.00000	.00000	-.00167

RUN NO. 244/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.798	-4.947	.10940	.08120	-.00220	-.00100	.03090	-.01270	.96820	641.10000	.00870
.799	-2.963	.11390	.03800	.00320	-.00400	.00860	-.00310	.96710	641.10000	.00240
.799	-.969	.11570	.00390	.00500	-.00480	-.00480	.00250	.95670	641.10000	-.00150
.800	.027	.11570	-.01400	.00590	-.00510	-.00120	.00550	.94690	641.10000	-.00350
.802	1.062	.11580	-.03270	.00710	-.00550	-.01920	.00830	.95110	641.10000	-.00550
.797	3.120	.11350	-.06930	.01040	-.00670	-.00480	.00500	.94760	641.10000	-.01320
.798	5.183	.10890	-.11200	.01480	-.00840	-.05460	.02370	.94220	641.10000	-.01600
.801	6.846	.10460	-.14470	.01870	-.01050	-.07100	.03110	.94180	641.10000	-.02060
GRADIENT		.00055	-.01844	.00140	-.00264	-.00791	.00332	-.00300	.00000	-.00227

RUN NO. 241/ 0 RN/L = 3.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.908	-4.950	.11760	.09190	-.00600	-.00130	.03450	-.01440	1.00100	621.20000	.00980
.899	-2.961	.12550	.04280	.00130	-.00370	.01090	-.00410	1.00100	621.20000	.00310
.901	-.969	.12730	.00440	.00480	-.00470	-.00500	.00250	.99370	621.20000	-.00140
.902	.023	.12840	-.01300	.00560	-.00480	-.01130	.00510	.98890	621.20000	-.00330
.901	1.061	.12750	-.03170	.00680	-.00520	-.01990	.00820	.98840	621.20000	-.00540
.902	3.120	.12520	-.07430	.01130	-.00610	-.03560	.01350	.98630	621.20000	-.01060
.900	5.185	.11870	-.11970	.01770	-.00810	-.09820	.02530	.97280	621.20000	-.01700
.899	6.715	.11310	-.15280	.02190	-.00960	-.07300	.03230	.97320	621.20000	-.02140
GRADIENT		.00290	-.02018	.00199	-.00055	-.00844	.00358	-.00305	-.00000	-.00225

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NDM, RN/L

(AEJ546) (26 JUN 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

YMRP = 32.3010 IN.  
 YMRP = .0000 IN.  
 ZMRP = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.7000  
 SPOBRK = 85.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 238/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.049	-4.954	.10360	.08720	-.00380	.00430	.03240	-.01430	1.30700	627.20000	.00980
1.051	-2.953	.10210	.04200	.00190	-.00060	.01230	-.00520	1.31800	627.20000	.00390
1.052	-.970	.10500	.00740	.00400	-.00360	-.00100	.00070	1.27500	627.20000	-.00030
1.050	.023	.10720	-.01050	.00460	-.00510	-.00930	.00410	1.24300	627.20000	-.00260
1.051	1.058	.10690	-.02870	.00560	-.00670	-.01690	.00720	1.23300	627.20000	-.00480
1.047	3.118	.10550	-.06620	.00800	-.00960	-.03320	.01420	1.21000	627.20000	-.00970
1.049	5.184	.10430	-.10820	.01260	-.01370	-.05180	.02270	1.19800	627.20000	-.01540
1.051	6.675	.10310	-.13650	.01580	-.01610	-.06490	.02880	1.19500	627.20000	-.01930
	GRADIENT	.00047	-.01874	.00136	-.00169	-.00796	.00345	-.01409	-.00000	-.00237

RUN NO. 235/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.197	-4.948	.08930	.08620	-.00310	.00350	.03520	-.01550	1.40800	570.10000	.01050
1.201	-2.954	.09340	.04650	.00070	-.00020	.01460	-.00660	1.38900	570.10000	.00480
1.200	-.968	.09530	.01050	.00260	-.00290	.00010	-.00010	1.34900	570.10000	.00040
1.199	.026	.09460	-.00710	.00350	-.00400	-.00760	.00320	1.34100	570.10000	-.00190
1.201	1.059	.09450	-.02390	.00430	-.00530	-.01470	.00630	1.30800	570.10000	-.00410
1.199	3.122	.09400	-.06080	.00700	-.00770	-.03140	.01370	1.27500	570.10000	-.00920
1.195	5.175	.09360	-.10220	.01050	-.01100	-.04920	.02200	1.25700	570.10000	-.01480
1.196	6.660	.09370	-.12730	.01230	-.01330	-.06160	.02780	1.24400	570.10000	-.01860
	GRADIENT	.00053	-.01811	.00118	-.00137	-.00807	.00354	-.01699	-.00000	-.00240

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NOM, RN/L

(AEJ047) (26 JUN 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 24.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRON = .000 BDFAP = -11.700  
 SPDRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 248/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.538	-5.013	.09130	.07160	-.00220	.00590	.02280	-.00950	.54790	480.90000	.00630
.600	-2.937	.09170	.03490	.00310	.00740	.00740	-.00270	.54760	480.90000	.00220
.600	-.981	.09190	.02300	.00420	-.00360	-.00430	.00210	.54600	480.90000	-.00110
.598	.032	.09150	-.01360	.00420	-.00350	-.00890	.00400	.54600	480.90000	-.00250
.600	1.041	.09110	-.02710	.00460	-.00740	-.01320	.00600	.54750	480.90000	-.00400
.598	3.062	.08880	-.06090	.00700	-.01130	-.02700	.01170	.54910	480.90000	-.00810
.597	5.065	.08850	-.10020	.01020	-.01490	-.04210	.01810	.54960	480.90000	-.01250
.599	7.105	.08230	-.14020	.01410	-.01970	-.06030	.02620	.55590	480.90000	-.01780
.598	9.127	.07740	-.17750	.01730	-.02400	-.08080	.03460	.56020	480.90000	-.02300
GRADIENT		-.02247	-.01559	.00460	-.00196	-.00558	.00233	.00030	.00000	-.00167

RUN NO. 245/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.799	-5.036	.09310	.07600	.00220	.00500	.02320	-.01000	.54340	642.10000	.00730
.800	-3.021	.09480	.03680	.00250	.00740	.00790	-.00310	.54310	642.10000	.00250
.798	-.986	.09540	.02300	.00370	-.00360	-.00360	.01190	.54590	642.10000	-.00100
.796	.033	.09670	-.01450	.00450	-.00390	-.00340	.00420	.54380	642.10000	-.00270
.799	1.048	.09610	-.03170	.00520	-.00440	-.01380	.00620	.54550	642.10000	-.00420
.799	3.079	.09380	-.06660	.00770	-.00890	-.02800	.01230	.54700	642.10000	-.00860
.796	5.110	.09110	-.10560	.01030	-.01260	-.04290	.01880	.54980	642.10000	-.01300
.801	7.137	.08590	-.14580	.01400	-.01750	-.06170	.02710	.55540	642.10000	-.01830
.801	9.168	.07650	-.18610	.01740	-.02180	-.08030	.03520	.56430	642.10000	-.02340
GRADIENT		-.02011	-.01701	.00004	-.00142	-.00562	.00249	-.00016	-.00000	-.00190

RUN NO. 242/ 0 RN/L = 3.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBV
.907	-5.034	.08660	.06250	-.00100	.00780	.02410	-.01370	.55830	620.30000	.00770
.904	-3.001	.08940	.04020	.00220	.00260	.00890	-.00380	.55490	620.30000	.00290
.898	-.981	.09300	.02170	.00360	-.00070	-.00360	.00170	.54890	620.30000	-.00100
.902	.029	.08960	-.01390	.00430	-.00290	-.00890	.00400	.55350	620.30000	-.00260
.905	1.052	.08770	-.03200	.00460	-.00480	-.01420	.00640	.55600	620.30000	-.00440
.900	3.070	.08880	-.06920	.00730	-.00930	-.02800	.01270	.55570	620.30000	-.00870
.897	5.110	.08820	-.10890	.00960	-.01450	-.04230	.01910	.55430	620.30000	-.01320
.900	7.141	.08260	-.14860	.01280	-.01920	-.05990	.02680	.55960	620.30000	-.01820
.899	9.174	.07420	-.19330	.01620	-.02380	-.07640	.03440	.56770	620.30000	-.02310
GRADIENT		-.00235	-.01785	.00080	-.00197	-.00599	.00268	.00037	.00000	-.00199



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NOM. RN/L

(AEJ047) (26 JUN 74)

## REFERENCE DATA

SEEF = 2.4215 SQ.FT. YMRP = 32.3515 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREP = 28.1024 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEV-N = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 239/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.055	-5.029	.02570	.00020	-.00270	.00030	.02540	-.01180	.61510	629.80000	.00850
1.050	-3.007	.02340	.04080	.00140	.00360	.01070	-.00470	.61680	629.80000	.00360
1.043	-.985	.02140	.00590	.00360	-.00060	-.00240	.00100	.61810	629.80000	-.00050
1.055	.026	.01890	-.01130	.00480	-.00250	-.00310	.00410	.62040	629.80000	-.00250
1.056	1.038	.01820	-.02980	.00610	-.00430	-.01550	.00700	.62040	629.80000	-.00460
1.051	3.066	.02010	-.06430	.00940	-.00850	-.03010	.01360	.61910	629.80000	-.00920
1.049	5.102	.02260	-.10340	.01280	-.01350	-.04510	.02060	.61750	629.80000	-.01410
1.048	7.129	.02750	-.13990	.01490	-.01770	-.05920	.02710	.61370	629.80000	-.01840
1.051	9.153	.02520	-.17350	.01670	-.02280	-.07540	.03450	.61520	629.80000	-.02320
GRADIENT		-.00265	-.01734	.00131	-.00198	-.00659	.00311	.00045	-.00000	-.00210

RUN NO. 236/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.197	-5.026	.00630	.07620	.00220	.00720	.02230	-.01040	.62840	568.80000	.00750
1.197	-3.005	.00500	.04130	.00200	.00320	.00990	-.00430	.62930	568.80000	.00330
1.198	-.984	.00070	.00320	.00250	-.00160	-.00250	.00100	.63220	568.80000	-.00030
1.197	.025	.00190	-.00600	.00300	-.00350	-.00840	.00370	.63210	568.80000	-.00210
1.198	1.041	.00020	-.02250	.00370	-.00520	-.01440	.00640	.63260	568.80000	-.00400
1.196	3.067	.00100	-.05710	.00580	-.00830	-.02660	.01210	.63200	568.80000	-.00800
1.195	5.093	.00410	-.09290	.00790	-.01180	-.04060	.01870	.62990	568.80000	-.01260
1.194	7.117	.00870	-.12670	.00890	-.01660	-.05310	.02480	.62660	568.80000	-.01680
1.197	9.145	.00990	-.15760	.00820	-.01900	-.06690	.03070	.62640	568.80000	-.02070
GRADIENT		-.00262	-.01615	.00082	-.00188	-.00594	.00275	.00042	-.00000	-.00166

ARC 11-747 QM33A B C M F W V NOM. RN/L

(AEJ046) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 26.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEWIN = .0000  
 ALLRON = .0000 BDFLAP = -11.7000  
 SPBBA = 85.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 249/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.599	-4.932	.09480	.07420	-.00010	-.00120	.02720	-.01120	.95760	481.40000	.00780
.599	-2.952	.09480	.03280	-.00430	-.00430	.00670	-.00220	.95140	481.40000	.00180
.601	-.965	.09320	.06130	.00590	-.00470	-.00530	.00260	.94260	481.40000	-.00160
.603	.028	.09370	-.01580	.00620	-.00590	-.01180	.00540	.93760	481.40000	-.00350
.599	1.057	.09910	-.03000	.00660	-.00520	-.01740	.00770	.93710	481.40000	-.00510
.597	3.110	.09760	-.06600	.00870	-.00620	-.03250	.01410	.92660	481.40000	-.00960
.603	5.167	.09390	-.10550	.01250	-.00760	-.05100	.02210	.93210	481.40000	-.01500
.600	6.898	.08990	-.13980	.01610	-.00950	-.06740	.02940	.92880	481.40000	-.01980
GRADIENT		.09035	-.01710	.00097	-.00054	-.00715	.00361	-.00383	.00000	-.00208

RUN NO. 246/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.802	-5.051	.08850	.08190	.01260	.00410	.00430	-.00400	.59870	644.60000	.00410
.799	-3.078	.09090	.03970	.00680	-.00010	.00030	-.00110	.59580	644.60000	.00160
.799	-.977	.09160	.00170	.00380	-.00280	-.00440	.00180	.59530	644.60000	-.00080
.797	.035	.09000	.00160	.00200	-.00430	-.00750	.00350	.59580	644.60000	-.00210
.800	1.056	.08960	-.03520	.00280	-.00550	-.01060	.00520	.59580	644.60000	-.00730
.797	3.102	.08920	-.06850	.00210	-.01070	-.01640	.00850	.59630	644.60000	-.00810
.797	5.137	.08470	-.10040	-.00630	-.01350	-.01940	.00090	.59770	644.60000	-.00840
.800	7.182	.08270	-.13190	-.00990	-.01720	-.02430	.00390	.59840	644.60000	-.01080
.798	9.228	.07320	-.17020	-.01240	-.01710	-.03570	.01960	.60240	644.60000	-.01450
GRADIENT		-.08038	-.00775	-.00146	-.00169	-.00276	.00158	.00008	-.00000	-.00127

RUN NO. 243/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
.898	-5.057	.08960	.07160	.02270	.00660	-.01340	.00290	.59560	613.40000	-.00020
.902	-3.023	.08540	.03730	.01350	.00130	-.00880	.00230	.59790	613.40000	-.00040
.899	-.985	.08520	.00310	.00600	-.00170	-.00770	.00280	.59810	613.40000	-.00150
.903	.033	.08180	-.01530	.00220	-.00260	-.00750	.00330	.59360	613.40000	-.00190
.900	1.061	.08420	-.03220	.00240	-.00400	-.00930	.00450	.59830	613.40000	-.00290
.901	3.098	.08180	-.06210	.00690	-.00800	-.00930	.00570	.59330	613.40000	-.00450
.904	5.190	.07850	-.08750	-.01480	-.01140	-.00740	.00610	.60050	613.40000	-.00550
.901	7.189	.07300	-.11470	-.02350	-.01430	-.00530	.00600	.60300	613.40000	-.00850
.900	9.236	.06940	-.15820	-.02630	-.01720	-.01540	.01100	.60430	613.40000	-.00890
GRADIENT		-.09058	-.01633	-.00331	-.00148	-.00015	.00058	.00022	-.00000	-.00067



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TABULATED SOURCE DATA - QASSA

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ARC 11-747 QASSA B C M F W V NOM. RN/L

(AEJ048) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 53. FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRCP = 29.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRON = .000 BDPLAP = -11.700  
 SPDGRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 240/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.049	-5.044	-.00170	.00340	.00990	.01080	-.00260	-.00280	.63330	627.70000	.00320
1.055	-5.015	-.00170	.00310	.00390	.00660	-.00140	-.00140	.63330	627.70000	.00170
1.062	-.983	-.01700	.01960	.00090	-.00190	-.00580	.00170	.63830	627.70000	-.00060
1.051	.024	-.01480	.00150	.00100	-.00240	-.00890	.00360	.63760	627.70000	-.00210
1.048	1.047	-.01360	-.02490	.00270	-.00400	-.01170	.00570	.1720	627.70000	-.00360
1.048	3.068	-.00380	-.06720	.00380	-.00910	-.01990	.01050	.63400	627.70000	-.00720
1.049	5.127	-.00290	-.09720	-.00280	-.01300	-.02070	.01220	.63370	627.70000	-.00900
1.052	7.163	-.00190	-.12440	-.00320	-.01590	-.01900	.01250	.63340	627.70000	-.01000
1.051	9.205	-.00340	-.14610	-.01410	-.01760	-.02110	.01400	.63390	627.70000	-.01120
	GRADIENT	.00076	-.01993	.00007	-.00244	-.00296	.00195	-.00025	-.00000	-.00146

RUN NO. 237/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.197	-5.033	-.02330	.00080	.01150	.00630	-.00610	-.00270	.64080	569.10000	.00190
1.200	-5.014	-.02610	.04790	.00650	.00400	-.00510	.00010	.64170	569.10000	.00080
1.200	-.988	-.02770	.01160	.00470	.00140	-.00850	.00290	.64230	569.10000	-.00130
1.199	.023	-.03070	-.01920	.00330	-.00260	-.00930	.00410	.64330	569.10000	-.00220
1.195	1.044	-.02900	-.02290	.00240	-.00280	-.01080	.00550	.64270	569.10000	-.00330
1.193	3.081	-.02520	-.05830	.00020	-.00690	-.01430	.00840	.64150	569.10000	-.00570
1.194	5.115	-.02160	-.08840	-.00410	-.01090	-.01330	.00950	.64030	569.10000	-.00730
1.197	7.152	-.02450	-.11830	-.00840	-.01190	-.01320	.01000	.64140	569.10000	-.00820
1.196	9.198	-.02370	-.14720	-.01490	-.01440	-.01600	.01180	.64110	569.10000	-.00950
	GRADIENT	.00007	-.01738	-.00104	-.00182	-.00147	.00135	-.00001	-.00000	-.00106

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

PAGE 244

ARC 11-747 QAS3A B C M F M V NOM. RNVL SEAL-EL

(AEJ043) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 24.1104 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 375/0 RNVL = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CT	CYN	CBL	CVV	CYNV	XCF/L	Q	CBLY
.539	-1.515	-1.1230	.00420	-.00060	-.00300	-.00240	.00060	.84580	480.80000	.00010
.539	.104	-1.1220	.00440	-.00060	-.00300	-.00340	.00090	.81740	480.80000	-.00010
.539	1.115	-1.1210	.00530	-.00070	-.00270	-.00240	.00060	.78640	480.80000	.00010
.536	1.626	-1.1230	.00440	-.00060	-.00280	-.00280	.00060	.77690	480.80000	.00000
.536	3.572	-1.1270	.00490	-.00060	-.00270	-.00210	.00050	.74510	480.80000	.00010
.600	5.558	-1.1320	.00530	-.00090	-.00290	-.00260	.00070	.72590	480.80000	.00000
.537	7.621	-1.1320	.00400	-.00090	-.00280	-.00270	.00070	.71310	480.80000	.00010
.600	9.595	-1.1420	.00310	-.00110	-.00240	-.00260	.00070	.70480	480.80000	.00000
.535	12.640	-1.1500	.00100	-.00220	-.00430	-.00320	.00090	.63380	480.80000	-.00010
.599	15.690	-1.1490	.00630	-.00160	-.00160	-.00410	.00020	.64460	480.80000	-.00020
.537	18.730	-1.1600	.00520	-.00160	-.00200	-.00360	.00110	.68120	480.80000	-.00010
.537	21.760	-1.1550	.00660	-.00200	-.00240	-.00380	.00110	.67360	480.80000	-.00010
.537	24.720	-.08130	-.02460	-.00170	-.00780	-.00520	.00180	.65430	480.80000	-.00080
.535	28.680	-.00240	.00640	-.00690	.00250	.00080	-.00080	.63280	480.80000	.00110
	GRADIENT	-.00161	.00015	.00008	.00016	.00016	-.00005	-.00236	.00000	.00002

RUN NO. 369/0 RNVL = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFLO	CT	CYN	CBL	CVV	CYNV	XCF/L	Q	CBLY
.732	-1.511	-1.1170	.00490	-.00100	-.00190	-.00140	.00020	.86310	634.20000	.00020
.802	-.100	-1.1160	.00370	-.00100	-.00170	-.00160	.00030	.83270	634.20000	.00020
.732	1.109	-1.1220	.00510	-.00110	-.00160	-.00080	.00010	.79610	634.20000	.00030
.801	3.562	-1.1230	.00440	-.00100	-.00160	-.00140	.00030	.78430	634.20000	.00020
.800	5.563	-1.1350	.00480	-.00120	-.00110	-.00080	.00000	.74330	634.20000	.00030
.801	7.618	-1.1410	.00370	-.00070	-.00140	-.00170	.00040	.73170	634.20000	.00010
.799	9.595	-1.1560	.00260	-.00100	-.00090	-.00020	.00060	.71970	634.20000	.00000
.798	12.620	-1.1490	.00140	-.00120	-.00180	-.00200	.00050	.71340	634.20000	.00000
.800	15.690	-1.1640	.00150	-.00390	-.00050	-.00110	.00020	.69570	634.20000	.00020
.799	18.760	-1.1630	.00220	-.00520	-.00050	-.00060	.00040	.69080	634.20000	.00030
.799	21.710	-1.1240	.00650	-.00660	-.00270	-.00350	-.00030	.68190	634.20000	.00060
.798	24.740	-.04220	.00370	-.00840	-.00330	-.00660	-.00170	.66880	634.20000	.00160
.800	28.680	-.02070	.02180	-.00930	-.00010	-.00540	-.00240	.64520	634.20000	.00260
	GRADIENT	-.00401	.00008	-.00005	.00018	.00016	-.00005	-.00271	.00000	.00030

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 243

ARC 11-747 0453A B C H F M V NOM. RN/L SEAL EL

(AEJ049) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 ATLEON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RODDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 368 / 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.900	-1.545	-1.1470	.00430	-.00130	-.00110	-.00120	.00010	.88480	614.00000	.00040
.899	.085	-1.1190	.00440	-.00120	-.00110	-.00130	.00010	.84570	614.00000	.00030
.902	1.093	-1.2630	.00560	-.00130	-.00090	-.00130	.00010	.80570	614.00000	.00030
.900	1.619	-1.3130	.00510	-.00150	-.00110	-.00110	.00010	.79270	614.00000	.00030
.901	3.598	-1.4330	.00540	-.00170	-.00090	-.00120	.00010	.75900	614.00000	.00030
.903	5.572	-1.6880	.00440	-.00140	-.00030	-.00180	.00010	.74300	614.00000	.00010
.901	7.635	-1.7860	.00250	-.00100	.00010	-.00200	.00010	.72370	614.00000	.00010
.903	9.579	-1.7140	.00130	-.00130	.00160	-.00210	.00010	.71700	614.00000	.00000
.900	12.640	-1.7610	.00360	-.00220	.00100	-.00140	.00010	.70530	614.00000	.00030
.900	15.720	-1.8800	.00470	-.00390	.00010	-.00150	.00010	.69810	614.00000	.00050
.900	18.720	-1.7990	.01020	-.00590	.00020	-.00110	-.00090	.68830	614.00000	.00100
.900	21.750	-1.4660	.00970	-.00590	-.00050	-.00410	-.00210	.67540	614.00000	.00180
.900	24.730	-.05840	.01070	-.00560	.00010	.00200	-.00190	.64980	614.00000	.00210
.901	28.650	-.03990	.00520	-.00590	.00100	-.00040	-.00070	.64340	614.00000	.00130
GRADIENT		-.00040	.00028	-.00011	.00004	.00002	.00000	-.00218	-.00000	-.00002

RUN NO. 367 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
1.049	-1.574	-1.1620	.00240	-.00110	.00020	-.00150	.00010	.91650	628.90000	.00030
1.054	.086	-1.1250	.00240	-.00120	.00010	-.00200	.00010	.86660	628.90000	.00020
1.055	1.091	-1.3930	.00410	-.00130	.00020	-.00190	.00010	.82450	628.90000	.00020
1.055	1.601	-1.4730	.00360	-.00130	.00020	-.00160	.00010	.81200	628.90000	.00030
1.053	3.589	-1.7590	.00400	-.00160	.00040	-.00120	.00000	.77860	628.90000	.00040
1.051	5.562	-1.9870	.00500	-.00180	.00040	-.00150	.00010	.76140	628.90000	.00030
1.052	7.626	-2.1540	.00560	-.00210	.00010	-.00170	.00020	.74610	628.90000	.00030
1.052	9.557	-2.2610	.00510	-.00230	.00180	-.00140	.00010	.73480	628.90000	.00030
1.051	12.600	-2.3270	.00160	-.00050	.00000	-.00170	.00020	.71960	628.90000	.00020
1.055	15.680	-2.3410	.00440	-.00220	.00190	-.00230	.00010	.70830	628.90000	.00000
1.051	18.710	-2.3870	.00610	-.00280	.00210	-.00210	.00010	.70010	628.90000	.00010
1.047	21.740	-.29030	.00680	-.00260	.00160	-.00180	.00020	.69170	628.90000	.00020
1.052	24.760	-.19090	.00600	-.00170	.00030	-.00040	-.00020	.67890	628.90000	.00040
1.050	28.690	-.11840	.00010	-.00030	.00020	-.00130	-.00010	.66070	628.90000	.00060
GRADIENT		-.01405	.00042	-.00012	.00006	.00012	-.00005	-.00315	.00000	.00003

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L SEAL,EL

(AEJ049) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILRON = .0000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 366/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBV
1.190	-1.590	-1.1690	.00250	-.00070	-.00020	.00500	-.00190	.92830	569.90000	.00100
1.201	.069	-1.1170	.00260	-.00070	.00000	.00490	-.00170	.88180	569.90000	.00080
1.204	1.071	-1.2910	.00300	-.00110	.00010	.00450	-.00180	.83470	569.90000	.00090
1.204	1.611	-1.3550	.00400	-.00110	.00010	.00490	-.00190	.81950	569.90000	.00090
1.200	3.564	-1.6150	.00510	-.00110	.00020	.00230	-.00110	.78460	569.90000	.00070
1.199	5.330	-1.6420	.00360	-.00130	.00040	.00190	-.00090	.76500	569.90000	.00060
1.198	7.648	-2.0370	.00480	-.00140	.00060	-.00080	-.00080	.74360	569.90000	.00030
1.196	9.569	-2.1690	.00440	-.00150	.00020	-.00130	.00020	.73820	569.90000	.00020
1.197	12.620	-2.3470	.00470	-.00170	.00070	-.00160	.00020	.72430	569.90000	.00020
1.195	15.690	-2.3960	.00560	-.00210	.00110	-.00150	.00020	.71260	569.90000	.00010
1.197	18.740	-2.4180	.00790	-.00280	.00080	-.00130	.00010	.70390	569.90000	.00020
1.194	21.710	-2.3270	.00530	-.00200	.00140	-.00050	.00070	.69520	569.90000	-.00010
1.197	24.680	-2.1220	.00390	-.00120	.00170	-.00030	.00120	.68570	569.90000	-.00010
1.194	28.640	-1.7680	.00730	-.00210	.00200	-.00230	.00050	.67390	569.90000	.00000
	GRADIENT	.00111	.00073	-.00011	.00008	-.00059	.00017	-.00333	.00000	-.00005

ARC 11-747 0453A B C M F W V NOM. RN/L SEAL-EL (AEJUSJ) ( 12 MAR 74 )

REFERENCE DATA

SCALE = 2.4210 SQ.FT.  
L-REF = 14.2440 IN.  
B-REF = 24.1004 IN.  
SCALE = .0000 SCALE

WREF = 32.3510 IN.  
YREF = .0000 IN.  
ZREF = 11.2500 IN.

BETA = .0000 ELEVON = .0000  
AILRON = .0000 BOFLAP = 16.300  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = .0000 ELEV-R = .0000

PARAMETRIC DATA

RUN NO. 365/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CIY	CYV	CYV	XCP/L	Q	CBLV
.537	-1.550	.00230	.00190	-.00260	-.00160	.00280	-.00030	.00280	.70130	478.50000	.00030
.537	.005	.00050	.00070	-.00070	-.00150	.00000	-.00020	.00000	.82240	478.50000	.00020
.602	1.122	.00050	.00120	-.00070	-.00160	.00050	-.00040	.00000	.54250	478.50000	.00030
.599	1.611	.00030	.00150	-.00080	-.00190	.00050	-.00040	.00000	.57990	478.50000	.00040
.597	3.554	.00780	.00320	-.00120	-.00230	.00020	-.00030	.00000	.61430	478.50000	.00030
.597	5.567	.00620	.00580	-.00110	-.00260	.00040	-.00030	.00000	.62370	478.50000	.00030
.597	7.611	.00360	.00180	-.00130	-.00260	.00090	-.00050	.00000	.62920	478.50000	.00040
.598	9.592	.00110	.00160	-.00120	-.00320	.00070	-.00030	.00000	.63190	478.50000	.00030
.603	12.640	-.00570	.00190	-.00140	-.00390	.00020	-.00030	.00000	.63600	478.50000	.00030
.596	15.690	-.01340	.00580	-.00260	-.00390	.00030	-.00030	.00000	.63890	478.50000	.00030
.600	18.730	-.02730	.00330	-.00220	-.00480	.00010	-.00020	.00000	.64300	478.50000	.00040
.598	21.790	-.03110	.00550	-.00210	-.00480	.00050	-.00020	.00000	.64270	478.50000	.00030
.599	24.710	-.00770	-.00030	-.00120	-.00490	.00000	-.00020	.00000	.63500	478.50000	.00030
.599	28.680	.06880	.01390	-.00620	-.00180	.00330	-.00140	.00000	.61130	478.50000	.00100
	GRADIENT	-.00014	.00060	-.00014	-.00012	.00003	-.00001	.00000	-.03855	.00000	.00002

RUN NO. 364/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CL/FWD	CY	CYN	CBL	CIY	CYV	XCP/L	Q	CBLV
.600	-1.577	.01340	.00190	-.00090	-.00160	.00080	-.00050	.75010	642.60000	.00050
.601	.092	.01290	.00100	-.00080	-.00160	.00070	-.00040	.80180	642.60000	.00040
.600	1.112	.01190	.00180	-.00090	-.00170	.00080	-.00050	.50590	642.60000	.00040
.600	1.624	.01130	.00260	-.00090	-.00180	.00090	-.00050	.56430	642.60000	.00040
.797	3.560	.01020	.00260	-.00120	-.00240	.00110	-.00060	.60980	642.60000	.00050
.799	5.557	.00490	.00160	-.00120	-.00270	.00100	-.00050	.62610	642.60000	.00040
.600	7.611	-.00140	.00150	-.00140	-.00280	.00130	-.00070	.63410	642.60000	.00050
.603	9.571	-.00610	.00090	-.00170	-.00190	.00120	-.00060	.63740	642.60000	.00050
.797	12.610	-.01210	.00140	-.00260	-.00190	.00170	-.00080	.63980	642.60000	.00060
.799	15.680	-.02620	-.00030	-.00340	-.00120	.00140	-.00070	.64470	642.60000	.00050
.600	18.730	-.03100	-.00130	-.00400	-.00080	.00250	-.00100	.64450	642.60000	.00080
.796	21.790	-.01970	-.00040	-.00460	-.00010	.00360	-.00150	.63930	642.60000	.00110
.796	24.720	.02910	.00420	-.00640	-.00230	.00670	-.00290	.62340	642.60000	.00220
.799	28.660	.05940	.01640	-.00780	-.00060	.00670	-.00310	.61450	642.60000	.00230
	GRADIENT	-.00079	.00029	-.00008	-.00020	.00009	-.00003	-.05092	.00000	.00001

ARC 11-747 0453A B C M F W V NOM. RNVL SEAL EL

(AEJ055) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. DRGF = 32.3510 IN.  
 LREF = 14.2440 IN. WREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2300 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = 16.3000  
 SPOBCK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 363 / 0 RN/L = 3.74 GRADIENT INTERVAL = -5.05 / 5.05

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYV	W/P/L	Q	CBLV
.902	-1.599	.01510	.00230	-.00100	-.00120	.00000	-.00060	.75120	615.90000	.00050
.901	.076	.01260	.00100	-.00110	-.00110	.00050	-.00050	1.18200	615.90000	.00040
.902	1.093	.00860	.00230	-.00090	-.00140	.00030	-.00040	.68800	615.90000	.00040
.903	1.608	.00740	.00210	-.00120	-.00130	.00070	-.00050	.59690	615.90000	.00050
.903	3.545	.00180	.00270	-.00150	-.00200	.00010	-.00060	.62920	615.90000	.00050
.902	5.550	-.00180	.00230	-.00150	-.00140	.00120	-.00070	.53500	615.90000	.00050
.903	7.568	-.01250	.00090	-.00110	-.00160	.00050	-.00040	.64460	615.90000	.00040
.903	5.568	-.01370	.00040	-.00200	-.00070	.00030	-.00030	.84300	615.90000	.00030
.904	12.590	-.02310	.00050	-.00210	-.00180	.00120	-.00060	.64620	615.90000	.00050
.901	15.660	-.01420	.00340	-.00320	-.00030	.00200	-.00090	.65230	615.90000	.00070
.901	13.720	-.01490	.00310	-.00410	-.00010	.00310	-.00140	.65120	615.90000	.00110
.903	21.720	-.01420	.00040	-.00340	.00230	.00030	-.00020	.64680	615.90000	.00100
.903	24.700	-.01320	.00420	-.00420	-.00340	.00060	-.00040	.62450	615.90000	.00130
.900	28.660	-.03900	.00170	-.00470	.00020	.00400	-.00010	.62110	615.90000	.00160
GRADIENT		-.00320	.00222	-.00012	-.00020	.00010	-.00010	-.00023	.00000	.00001

RUN NO. 362 / 0 RN/L = 3.49 GRADIENT INTERVAL = -5.05 / 5.05

MACH	ALPHA	CLMF/D	CY	CYN	CBL	CYV	CYV	W/P/L	Q	CBLV
1.054	-1.597	.02140	.00200	-.00100	-.00200	.00100	-.00070	.66600	629.40000	.00060
1.052	.061	.01210	.00150	-.00090	-.00230	.00050	-.00060	.62370	629.40000	.00050
1.054	1.093	-.00230	.00230	-.00100	-.00200	.00080	-.00070	.64320	629.40000	.00060
1.054	1.609	-.00070	.00220	-.00140	-.00190	.00140	-.00090	.66040	629.40000	.00070
1.053	3.534	-.00240	.00290	-.00140	-.00210	.00150	-.00090	.65130	629.40000	.00070
1.050	5.536	-.00230	.00230	-.00150	-.00160	.00190	-.00100	.64510	629.40000	.00070
1.049	7.609	-.00670	.00420	-.00190	-.00190	.00120	-.00090	.63740	629.40000	.00060
1.049	9.565	-.007610	.00350	-.00140	-.00060	.00170	-.00100	.63300	629.40000	.00060
1.050	12.580	-.004400	.00190	-.00120	.00020	.00110	-.00070	.67180	629.40000	.00060
1.051	15.670	-.00990	.00200	-.00120	.00190	.00020	-.00030	.67200	629.40000	.00030
1.052	18.710	-.01200	.00440	-.00170	.00280	.00020	-.00030	.67200	629.40000	.00040
1.046	21.720	-.012910	-.00090	-.00040	.00400	.00010	-.00020	.66360	629.40000	.00020
1.050	24.720	-.00960	.00420	-.00140	.00200	-.00010	-.00030	.65900	629.40000	.00030
1.050	28.630	-.01640	.00510	-.00290	.00220	.00020	-.00010	.64430	629.40000	.00030
GRADIENT		-.01279	.00027	-.00010	.00001	.00015	-.00007	.00177	.00000	.00004



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 249

ARC 11-747 QAS3A B C H F W V NOM. RN/L SEAL EL

(AEJ050) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILERON = .0000 BDFLAP = 16.300  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 361/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CLIF/L	CY	CYN	CBL	CYV	CYVY	XCP/L	Q	CBLV
1.201	-1.587	.00900	.00250	-.00070	-.00210	.00050	-.00050	.79060	570.30000	.00040
1.200	.063	.00030	.00210	-.00060	-.00190	.00030	-.00040	.62700	570.30000	.00040
1.203	1.035	-.01410	.00350	-.00070	-.00180	.00130	-.00080	.69260	570.30000	.00050
1.203	1.602	-.02050	.00340	-.00080	-.00190	.00050	-.00050	.69640	570.30000	.00050
1.203	3.543	-.04330	.00390	-.00080	-.00160	.00120	-.00070	.70040	570.30000	.00050
1.201	5.525	-.06320	.00290	-.00100	-.00120	.00070	-.00050	.69920	570.30000	.00040
1.200	7.589	-.07940	.00260	-.00110	-.00080	.00020	-.00040	.69520	570.30000	.00040
1.198	9.573	-.08810	.00430	-.00130	-.00130	.00070	-.00030	.68860	570.30000	.00050
1.195	12.610	-.09780	-.00010	-.00120	-.00120	.00030	-.00040	.67900	570.30000	.00040
1.197	15.670	-.11620	.00410	-.00120	.00060	.00040	-.00040	.67680	570.30000	.00040
1.197	18.700	-.12960	.00390	-.00090	.00180	.00030	-.00030	.67050	570.30000	-.00010
1.196	21.720	-.12380	.00350	.00060	.00320	-.00150	.00040	.66490	570.30000	-.00040
1.199	24.700	-.11570	.00650	-.00160	.00220	-.00250	.00090	.65960	570.30000	.00010
1.197	28.640	-.10760	.00370	-.00230	.00180	-.00120	.00010	-.00773	.00000	.00003
	GRADIENT	-.01269	.00032	-.00004	.00010	.00018	-.00006			

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## TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C H F W V NDM. RN/L

(AEJ051) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 232/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.600	-4.937	.07550	.03570	.02040	-.01330	-.01170	.00880	.95320	481.20000	-.00520
.601	-2.959	.07900	-.00380	.02430	-.01610	-.03120	.01720	.94910	481.20000	-.01060
.599	-.972	.07990	-.03510	.02550	-.01670	-.04280	.02220	.93530	481.20000	-.01420
.597	.027	.07970	-.05240	.02600	-.01710	-.05060	.02530	.92750	481.20000	-.01630
.597	1.048	.07970	-.06880	.02660	-.01750	-.05660	.02780	.93980	481.20000	-.01820
.596	3.103	.07660	-.10410	.02870	-.01830	-.07090	.03380	.92370	481.20000	-.02240
.596	5.163	.07490	-.13850	.02990	-.01830	-.10530	.03950	.90890	481.20000	-.02620
.598	6.799	.07390	-.16530	.03030	-.01840	-.09580	.04360	.92610	481.20000	-.02870
	GRADIENT	.00017	-.01716	.00094	-.00057	-.00718	.00302	-.00410	-.00000	-.00209

RUN NO. 229/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.800	-4.972	.08690	.04030	.01920	-.01360	-.01070	.00860	.96180	640.70000	-.00480
.800	-2.951	.09270	-.00170	.02440	-.01680	-.03000	.01740	.95790	640.70000	-.01060
.801	-.980	.09490	-.03540	.02660	-.01790	-.04380	.02330	.94830	640.70000	-.01480
.800	.017	.09530	-.05550	.02780	-.01830	-.05070	.02620	.94110	640.70000	-.01690
.800	1.048	.09420	-.07300	.02900	-.01890	-.05980	.02990	.93600	640.70000	-.01930
.799	3.105	.09210	-.11020	.03140	-.01970	-.07470	.03600	.93570	640.70000	-.02370
.800	5.182	.08930	-.14700	.03340	-.01990	-.08930	.04190	.92960	640.70000	-.02760
.800	6.666	.09100	-.17160	.03390	-.01970	-.09870	.04540	.93870	640.70000	-.02980
.804		.09064	-.01851	.00144	-.00071	-.00782	.00334	-.00374	-.00000	-.00231
	GRADIENT									

RUN NO. 226/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	q	CBLV
.898	-4.958	.09420	.04870	.01680	-.01400	-.00650	.00730	1.00700	613.20000	-.00400
.904	-2.972	.10130	.00320	.02310	-.01650	-.02880	.01700	1.01300	613.20000	-.01020
.904	-.980	.10440	-.03520	.02660	-.01760	-.04390	.02350	1.00600	613.20000	-.01480
.903	.026	.10580	-.05540	.02830	-.01790	-.05100	.02660	.99970	613.20000	-.01700
.903	1.040	.10510	-.07310	.02960	-.01840	-.05890	.02990	.99460	613.20000	-.01930
.901	3.122	.10180	-.11670	.03440	-.01920	-.07780	.03800	.97870	613.20000	-.02490
.899	5.160	.09870	-.15600	.03710	-.01910	-.09210	.04350	.96360	613.20000	-.02860
.899	6.683	.09840	-.17720	.03540	-.01680	-.09840	.04510	.95920	613.20000	-.02940
	GRADIENT	.00100	-.02020	.00207	-.00061	-.00855	.00368	-.00367	-.00000	-.00252

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(AEJ051) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFAP = -11.700  
 SPDRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 223/ 0 RN/L = 3.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.048	-4.961	.08190	.05040	.01710	-.00380	-.00380	.00590	1.30300	624.20000	-.00270
1.055	-2.972	.08720	.01050	.02130	-.01220	-.02200	.01420	1.32800	624.20000	-.00800
1.052	-1.975	.09760	-.02800	.02420	-.01620	-.03860	.02150	1.25200	624.20000	-.01300
1.051	.014	.09170	-.04550	.02530	-.01780	-.04680	.02480	1.22300	624.20000	-.01530
1.049	1.045	.09070	-.06310	.02610	-.01940	-.05420	.02800	1.22600	624.20000	-.01750
1.050	3.108	.08870	-.09980	.02830	-.02210	-.06980	.03470	1.19700	624.20000	-.02220
1.051	5.176	.08860	-.14120	.03180	-.02580	-.08700	.04230	1.19100	624.20000	-.02750
1.049	6.640	.08820	-.16810	.03420	-.02790	-.09780	.04730	1.17500	624.20000	-.03480
	GRADIENT	.08090	-.01858	.00136	-.00176	-.02817	.00355	-.01604	.00000	-.00241

RUN NO. 220/ 0 RN/L = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYNV	XCF/L	Q	CBLV
1.202	-4.953	.06860	.05350	.01470	-.00710	-.00220	.00250	1.42700	573.60000	-.00850
1.204	-2.965	.07290	.01480	.01810	-.01100	-.01530	.01030	1.39600	573.60000	-.00570
1.203	-.981	.07430	-.02050	.02060	-.01380	-.03150	.01770	1.37100	573.60000	-.01560
1.203	.013	.07470	-.03880	.02170	-.01520	-.03970	.02130	1.31400	573.60000	-.01300
1.203	1.049	.07470	-.05520	.02250	-.01640	-.04680	.02430	1.31600	573.60000	-.01520
1.202	3.107	.07500	-.09200	.02450	-.01830	-.06150	.03090	1.27900	573.60000	-.01980
1.200	5.197	.07590	-.13030	.02680	-.02080	-.07770	.03810	1.24200	573.60000	-.02480
1.201	6.637	.07640	-.15470	.02760	-.02270	-.08930	.04320	1.22600	573.60000	-.02800
	GRADIENT	.06074	-.01796	.00120	-.00139	-.00792	.00352	-.01919	.00000	-.00240

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## TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C H F M V NMN, RN/L

(AEJ052) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.700  
 SPDRSK = 55.000 RUDDER = -25.000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 233 / 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.596	-5.030	.07170	.03720	.01710	-.03440	-.01040	.00740	.56960	475.40000	-.00390
.596	-3.000	.07240	.02280	.02010	-.05980	-.02610	.01430	.56890	475.40000	-.00860
.598	-1.987	.07090	.02820	.02140	-.01360	-.03710	.01890	.56950	475.40000	-.01160
.597	.025	.07090	.04630	.02190	-.01590	-.04180	.02100	.56900	475.40000	-.01340
.597	1.039	.07040	.06090	.02220	-.01780	-.04770	.02330	.57030	475.40000	-.01510
.597	3.057	.06870	.09440	.02410	-.02120	-.05880	.02800	.57170	475.40000	-.01280
.597	5.066	.06750	.13160	.02680	-.02500	-.07390	.03430	.57290	475.40000	-.02290
.596	7.103	.06550	.16660	.02780	-.02800	-.08770	.03990	.57450	475.40000	-.02640
.597	9.119	.06530	.19380	.02690	-.02960	-.09780	.04340	.57400	475.40000	-.02290
GRADIENT		-.00257	-.01676	.00263	-.00190	-.00538	.00225	.00046	-.00000	-.00163

RUN NO. 230 / 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.797	-5.028	.07200	.04240	.01830	-.03560	-.01080	.00760	.57130	637.80000	-.00400
.802	-3.041	.07440	.02360	.02060	-.01030	-.02630	.01480	.56900	637.80000	-.00870
.793	-1.935	.07560	.03370	.02220	-.01460	-.03740	.01970	.56730	637.80000	-.01240
.797	.021	.07650	.04900	.02320	-.01510	-.04350	.02230	.56800	637.80000	-.01420
.800	1.045	.07630	.06640	.02400	-.01580	-.04970	.02510	.56630	637.80000	-.01620
.799	3.077	.07390	.10080	.02560	-.01980	-.06110	.02390	.56810	637.80000	-.01960
.797	5.117	.07170	.13890	.02800	-.02340	-.07500	.03570	.57040	637.80000	-.02400
.799	7.145	.07030	.17330	.02750	-.02580	-.08680	.04310	.57150	637.80000	-.02660
.800	9.161	.06700	.20280	.02600	-.02660	-.09840	.04410	.57460	637.80000	-.02270
GRADIENT		-.00204	-.01711	.00482	-.00146	-.00572	.00247	-.00017	.00000	-.00179

RUN NO. 227 / 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.905	-5.039	.06640	.04580	.01860	-.03340	-.01010	.00770	.57400	619.10000	-.00380
.902	-3.042	.06950	.02580	.02130	-.02820	-.02580	.01460	.57440	619.10000	-.00870
.900	-1.986	.07040	.03150	.02320	-.01230	-.03830	.02030	.57310	619.10000	-.01280
.901	.018	.07120	.05100	.02380	-.01430	-.04370	.02270	.57260	619.10000	-.01460
.900	1.036	.07060	.06800	.02440	-.01640	-.05030	.02570	.57320	619.10000	-.01660
.901	3.077	.06770	.10520	.02680	-.02030	-.06310	.03140	.57560	619.10000	-.02080
.903	5.100	.06760	.14080	.02700	-.02470	-.07360	.03570	.57530	619.10000	-.02380
.902	7.148	.06440	.17340	.02580	-.02660	-.08340	.03920	.57400	619.10000	-.02610
.899	9.174	.06690	.21100	.02500	-.02870	-.09330	.04310	.57580	619.10000	-.02290
GRADIENT		-.00025	-.01813	.00287	-.00198	-.00608	.00274	.00018	-.00000	-.00197

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

ARC 11-747 QAS3A B C M F W V NOM. RN/L

UAEJ52 ( 12 MAR 74 )

PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000  
 AILROM = .000 BDFLAP = -11.700  
 SPD8RK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

REFERENCE DATA

SREF = 2.4210 SJ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

RUN NO. 224/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFLD	CY	CYN	CBL	CVV	CYNV	XCP/L	Q	CBLV
1.050	-5.042	.01020	.04520	.01680	-.03360	-.00940	.00740	.62590	625.30000	-.00330
1.053	-3.014	.00890	.00700	.02040	-.00790	-.02380	.01430	.62680	625.30000	-.00800
1.056	-.983	.00580	-.02600	.02250	-.01230	-.03600	.01990	.62880	625.30000	-.01200
1.053	.022	.00700	-.04480	.02370	-.01400	-.04230	.02280	.62800	625.30000	-.01400
1.054	1.029	.00650	-.06000	.02460	-.01550	-.04850	.02550	.62840	625.30000	-.01590
1.051	3.061	.00780	-.09640	.02730	-.01970	-.06150	.03140	.62750	625.30000	-.02010
1.054	5.085	.00850	-.13180	.02990	-.02450	-.07420	.03730	.62700	625.30000	-.02440
1.051	7.115	.01360	-.16570	.03010	-.02780	-.08660	.04250	.62340	625.30000	-.02800
1.051	9.147	.01670	-.19580	.02890	-.03030	-.09680	.04650	.62130	625.30000	-.03040
	GRADIENT	-.02013	-.01701	.00113	-.00191	-.074621	.00281	.00000	-.00000	-.00199

RUN NO. 221/ 0 RN/L = 2.87 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFLD	CY	CYN	CBL	CVV	CYNV	XCP/L	Q	CBLV
1.203	-5.037	-.01100	.04530	.01700	-.00290	-.00780	.00620	.64020	571.60000	-.00250
1.205	-3.003	-.01080	.01310	.01770	-.00740	-.01830	.01140	.64010	571.60000	-.00620
1.202	-.990	-.01170	-.01750	.01830	-.01110	-.02940	.01650	.64070	571.60000	-.00960
1.199	.017	-.01230	-.03380	.01900	-.01300	-.03600	.01940	.64100	571.60000	-.01160
1.196	1.040	-.01280	-.05040	.01990	-.01470	-.04140	.02190	.64130	571.60000	-.01340
1.198	3.059	-.01240	-.08440	.02130	-.01770	-.05390	.02760	.64110	571.60000	-.01740
1.200	5.089	-.00990	-.11770	.02250	-.02060	-.06570	.03310	.63940	571.60000	-.02130
1.198	7.123	-.00480	-.15180	.02280	-.02490	-.07780	.03860	.63610	571.60000	-.02530
1.198	9.143	-.00340	-.18100	.02110	-.02710	-.08810	.04320	.63510	571.60000	-.02840
1.202	GRADIENT	-.00029	-.01610	.00059	-.00171	-.00588	.00267	.00018	.00000	-.00185

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RN/L

(AEJ553) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000  
 AILRON = .000  
 SPDRK = 55.000  
 ELEV-L = .000  
 ELEV-R = .000  
 ELEWON = .000  
 BDFLAP = -11.700  
 RUDDER = -25.000

## PARAMETRIC DATA

RUN NO. 234/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CNV	XCF/L	Q	CBLV
.599	-5.009	.04650	.04640	.01480	.00570	-.01250	.00740	.61490	479.40000	-.00340
.597	-2.996	.04650	.04650	.01740	-.00550	-.02730	.01410	.61500	479.40000	-.00810
.598	-.967	.04610	-.02580	.02160	-.01040	-.03630	.01920	.61510	479.40000	-.01180
.596	.036	.04640	-.04400	.02170	-.01300	-.04310	.02140	.61500	479.40000	-.01340
.597	1.039	.04600	-.06070	.02220	-.01550	-.04750	.02340	.61510	479.40000	-.01500
.595	3.081	.04580	-.03820	.02550	-.02040	-.05600	.02480	.61510	479.40000	-.01670
.595	5.105	.04830	-.11340	.02730	-.02430	-.07040	.02350	.61410	479.40000	-.02250
.601	7.109	.04600	-.16040	.02630	-.02660	-.07820	.03630	.61430	479.40000	-.02440
.599	9.119	.03790	-.19250	.02610	-.03120	-.09230	.04180	.61820	479.40000	-.02780
GRADIENT		-.00011	-.01765	.00131	-.00246	-.00505	.00230	.00001	.00000	-.00173

RUN NO. 231/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CNV	XCF/L	Q	CBLV
.736	-5.058	.06810	.04780	.02830	-.00510	-.02580	.01180	.60550	636.70000	-.00370
.737	-3.014	.06800	.02680	.02540	-.00960	-.03330	.01650	.60460	636.70000	-.00920
.801	-.982	.07120	-.03570	.02320	-.01270	-.03920	.02010	.60390	636.70000	-.01220
.738	.034	.06920	-.05350	.02230	-.01590	-.04310	.02230	.60480	636.70000	-.01390
.800	1.061	.06930	-.07140	.02100	-.01680	-.04740	.02450	.60460	636.70000	-.01550
.736	3.105	.06810	-.10490	.01830	-.02200	-.05380	.02810	.60510	636.70000	-.01880
.756	5.130	.06440	-.13720	.01440	-.02440	-.05710	.03040	.60650	636.70000	-.02080
.800	7.121	.06320	-.16180	.00590	-.02580	-.05420	.02930	.60600	636.70000	-.02050
.759	9.227	.05740	-.19440	.00020	-.02470	-.05930	.03180	.60790	636.70000	-.02220
GRADIENT		-.00234	-.01615	-.00115	-.00202	-.00334	.00192	.00011	.00000	-.00154

RUN NO. 228/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CNV	XCF/L	Q	CBLV
.900	-5.056	.06930	.03480	.03880	-.00080	-.03990	.01720	.60450	615.70000	-.00930
.904	-3.011	.06370	-.00010	.03240	-.00760	-.04310	.02020	.60720	615.70000	-.01150
.903	-.998	.06100	-.03650	.02740	-.01210	-.04300	.02190	.60830	615.70000	-.01340
.903	.012	.06180	-.05420	.02420	-.01370	-.04640	.02390	.60790	615.70000	-.01420
.901	1.045	.06260	-.07210	.02160	-.01550	-.04830	.02840	.60740	615.70000	-.01600
.899	3.093	.06430	-.10300	.01600	-.02000	-.04950	.02710	.60660	615.70000	-.01790
.899	5.133	.06040	-.12880	.00800	-.02390	-.04800	.02750	.60820	615.70000	-.01910
.903	7.185	.05790	-.14730	-.00570	-.02410	-.04800	.02290	.60930	615.70000	-.01650
.901	9.217	.05720	-.18130	-.01320	-.02370	-.03650	.02220	.60940	615.70000	-.01610
GRADIENT		.00017	-.01691	-.00270	-.00199	-.00120	.00119	-.00012	.00000	-.00107

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

ARC 11-747 0453A B C M F W V NOM. RN/L

(AEJ053) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDELAP = -11.700  
 SPDRK = 55.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 225/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.055	-5.049	-.02420	.04690	.02750	-.00020	-.03370	.01560	.64080	626.50000	-.00810
1.054	-3.014	-.02790	.01570	.02380	-.00480	-.03710	.01850	.64200	626.50000	-.01020
1.054	-.981	-.03610	-.01410	.02050	-.01300	-.03940	.02070	.64450	626.50000	-.01210
1.054	.010	-.03240	-.03330	.02030	-.01400	-.04160	.02230	.64340	626.50000	-.01340
1.058	1.045	-.03030	-.05530	.02120	-.01520	-.04420	.02400	.64270	626.50000	-.01470
1.047	3.076	-.01810	-.09430	.02130	-.02030	-.05040	.02800	.63880	626.50000	-.01760
1.052	5.115	-.01750	-.12580	.01680	-.02300	-.05050	.02900	.63860	626.50000	-.01920
1.055	7.147	-.01490	-.15130	.01110	-.02530	-.04890	.02910	.63780	626.50000	-.02010
1.054	9.193	-.01640	-.17030	.00840	-.02560	-.04610	.02800	.63830	626.50000	-.01970
	GRADIENT	.00174	-.01829	-.00033	-.00240	-.00220	.00157	-.00056	-.00000	-.00122

RUN NO. 222/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.197	-5.042	-.04310	.04970	.02750	-.00360	-.03440	.01540	.64760	570.30000	-.00770
1.202	-3.019	-.04630	.01970	.02280	-.00630	-.03420	.01650	.64860	570.30000	-.00910
1.200	-.990	-.04630	-.01700	.02110	-.00850	-.03620	.01880	.64860	570.30000	-.01080
1.199	.011	-.04640	-.03170	.01960	-.01020	-.03710	.01990	.64860	570.30000	-.01170
1.199	1.049	-.04540	-.05070	.01830	-.01170	-.03850	.02100	.64830	570.30000	-.01260
1.198	3.070	-.04030	-.08160	.01470	-.01550	-.03990	.02280	.64700	570.30000	-.01420
1.193	5.107	-.03420	-.11130	.01010	-.01970	-.03930	.02390	.64470	570.30000	-.01580
1.196	7.148	-.03760	-.14170	.00550	-.02010	-.03700	.02350	.64590	570.30000	-.01640
	9.204	-.03820	-.16930	-.00210	-.02220	-.03800	.02420	.64610	570.30000	-.01720
	GRADIENT	.00093	-.01663	-.00133	-.00152	-.00096	.00104	-.00030	-.00000	-.00084

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(AEJ055, 112 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0390 SCALE

DNRF = 32.3010 IN.  
 YNRF = .0000 IN.  
 ZNRF = 11.2500 IN.

## PARAMETRIC DATA

ALPHA = .000  
 ELEVON = .000  
 AIRON = .000  
 BDFAP = -11.700  
 SDBAR = 55.000  
 RUDDER = .000  
 ELEV-L = .000  
 ELEV-R = .000

RUN NO. 332 / 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.597	-4.933	.07060	.09260	-.00750	.00240	.04170	-.01780	.96700	479.10000	.01230
.598	-2.949	.07200	.09270	-.00330	-.00020	.02290	-.00370	.95840	479.10000	.00660
.599	.027	.07340	.09280	.00020	-.00210	-.00020	-.00020	.92880	479.10000	.00020
.599	3.116	.07160	.09220	.00300	-.00320	-.00290	.00660	.92430	479.10000	-.00610
.598	5.166	.07000	.09270	.00710	-.00510	-.00380	.01700	.93000	479.10000	-.01170
.599	6.848	.06690	.09210	.01020	-.00690	-.00520	.02410	.92310	479.10000	-.01630
	GRADIENT	.07014	.09193	.00127	-.00067	-.00773	.00328	-.00578	-.00000	-.00227

RUN NO. 349 / 0 RN/L = 2.73 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
.903	-4.945	.08620	.11000	-.01400	.00290	.04920	-.02140	1.02100	613.90000	.01460
.902	-2.955	.08990	.09250	-.00700	-.00020	.02580	-.01110	1.02200	613.90000	.00780
.897	.028	.09420	.09200	-.00240	-.00290	-.00010	-.00020	.99190	613.90000	.00030
.903	3.121	.09010	.09140	.00580	-.00330	-.02570	.01080	.98790	613.90000	-.00740
.896	5.185	.08730	.09700	.01210	-.00530	-.04790	.02050	.98780	613.90000	-.01390
.901	6.734	.08290	.09440	.01650	-.00650	-.06360	.02750	.96930	613.90000	-.01830
	GRADIENT	.09054	.09214	.00240	-.00069	-.00915	.00392	-.00222	.00000	-.00269

RUN NO. 347 / 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	KCP/L	Q	CBLV
1.201	-4.944	.06150	.09650	-.00840	.00700	.04460	-.02030	1.06840	572.90000	.01390
1.204	-2.956	.06280	.09580	-.00410	.00270	.02490	-.00110	1.06600	572.90000	.00790
1.202	.028	.06470	.09130	.00000	-.00190	-.00040	.00000	1.04100	572.90000	.00020
1.199	3.119	.06430	.09560	.00420	-.00620	-.02540	.01120	1.03700	572.90000	-.00750
1.196	5.180	.06360	.09550	.00780	-.00960	-.04440	.01990	1.03200	572.90000	-.01340
1.200	6.708	.06270	.09320	.01000	-.01190	-.05690	.02560	1.02000	572.90000	-.01730
	GRADIENT	.07037	.09184	.00153	-.00161	-.00981	.00387	-.00451	-.00000	-.00264





DATE 56 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOM. RM/L

(AEJ056) (12 MAR 74)

## REFERENCE DATA

SHEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1034 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEWIN = .000  
 ALLRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 350/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFLD	CY	CYN	CBL	CVV	CYV	XCF/L	Q	CBV
.912	-5.034	.06210	.10340	-.00820	.01110	.03700	-.01670	.58190	613.00000	.01180
.913	-3.000	.06020	.05900	-.00510	.00640	.02030	-.00930	.58350	613.00000	.00670
.895	.030	.06380	-.00140	-.00130	-.00040	.00000	-.00020	.57920	613.00000	.00020
.912	3.076	.05970	-.05770	.00270	-.00730	-.02090	.00930	.58330	613.00000	-.00640
.898	5.156	.06230	-.09855	.00580	-.01270	-.03690	.01640	.58020	613.00000	-.01140
.913	7.137	.05670	-.14000	.00940	-.01750	-.05260	.02360	.58620	613.00000	-.01620
	GRADIENT	-.00008	-.01918	.00128	-.00225	-.00677	.00306	-.00003	.00000	-.00215

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L

(AEJ557) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4215 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 ALLCON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CVV	CYV	XCF/L	Q	CBLV
.600	-5.002	.04410	.09980	-.00910	.01090	.03250	-.01480	.61600	483.20000	.01080
.600	-2.992	.04300	.06190	-.00680	.00620	.01730	-.00800	.61650	483.20000	.00600
.600	.026	.04310	.02250	-.00170	.00020	-.00120	.00030	.61660	483.20000	-.00020
.599	3.089	.04380	-.05620	.00370	-.00670	-.01920	.00850	.61620	483.20000	-.00600
.599	5.095	.04510	-.09530	.00760	-.01220	-.03320	.01490	.61560	483.20000	-.01060
.599	7.120	.04060	-.13260	.01120	-.01750	-.05120	.02290	.61730	483.20000	-.01600
	GRADIENT	.00013	-.01948	.00173	-.00213	-.00602	.00272	-.00005	-.00000	-.00198

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CVV	CYV	XCF/L	Q	CBLV
.902	-5.060	.06330	.09010	.01670	.00800	.02000	-.00420	.60730	615.90000	.00470
.901	-3.017	.05940	.05600	.00580	.00480	.00740	-.00490	.60900	615.90000	.00420
.902	.034	.05540	.00080	-.00360	.00010	.00200	-.00100	.61090	615.90000	.00080
.899	3.101	.05720	-.04960	-.01180	-.00540	-.00190	.00230	.61010	615.90000	-.00220
.905	5.143	.05610	-.07900	-.01800	-.01030	-.00070	.00320	.61040	615.90000	-.00370
.897	7.185	.05660	-.11500	-.02340	-.01290	-.00460	.00580	.61020	615.90000	-.00570
	GRADIENT	-.00036	-.01726	-.00288	-.00162	-.00132	.00118	.00018	-.00000	-.00105

RUN NO. 348/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CVV	CYV	XCF/L	Q	CBLV
1.200	-5.035	-.04890	.09350	.00490	.01010	.00360	-.00590	.64940	572.70000	.00530
1.203	-3.010	-.05570	.05640	.00210	.00740	.00340	-.00420	.65160	572.70000	.00350
1.202	.021	-.05840	.00360	-.00170	.00170	-.00170	.00050	.65240	572.70000	.00000
1.199	3.078	-.05570	-.04890	-.00360	-.00470	-.00690	.00500	.65160	572.70000	-.00360
1.197	5.122	-.05200	-.08140	-.00690	-.00750	-.00750	.00660	.65060	572.70000	-.00530
1.199	7.156	-.04820	-.11390	-.01030	-.01110	-.00880	.00820	.64940	572.70000	-.00700
	GRADIENT	.00020	-.01750	-.00094	-.00199	-.00163	.00151	-.00000	.00000	-.00117

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RM/L

(AEJ058) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 14.2440 IN.  
 BREF = 28.1004 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

MACH	BETA	CLMFO	CY	CYN	CBL	CYV	CYV	KCP/L	Q	CBLV
.594	-4.943	.06580	.03230	.02380	-.01490	-.01710	.01220	.97070	479.70000	-.00700
.594	-2.954	.06890	-.02610	.02660	-.01680	-.03410	.01930	.96190	479.70000	-.01170
.596	.019	.06980	-.05440	.02800	-.01790	-.03310	.02710	.93420	479.70000	-.01720
.596	3.101	.06670	-.10790	.03190	-.01970	-.07570	.03680	.91860	479.70000	-.02410
.601	5.157	.06580	-.14200	.03320	-.02000	-.09050	.04270	.91750	479.70000	-.02810
.599	6.732	.06440	-.16440	.03220	-.01920	-.09880	.04540	.92420	479.70000	-.02970
	GRADIENT	.02209	-.01726	.00090	-.00056	-.00716	.00300	-.00681	-.00030	-.00209

RUN NO. 356/0 RM/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFO	CY	CYN	CBL	CYV	CYV	KCP/L	Q	CBLV
.901	-4.955	.08110	.05530	.01400	-.01280	-.00190	.00550	1.02107	614.90000	-.00230
.899	-2.975	.08520	.01070	.02000	-.01480	-.02320	.01450	1.01610	614.90000	-.00820
.902	.017	.08920	-.04760	.02450	-.01590	-.04530	.02370	.99640	614.90000	-.01470
.899	3.113	.08400	-.11080	.03180	-.01770	-.07240	.03550	.93330	614.90000	-.02300
.899	5.173	.08420	-.13170	.03340	-.01810	-.09070	.04280	.97140	614.90000	-.02780
.899	6.703	.08290	-.17940	.03600	-.01700	-.09950	.04620	.96730	614.90000	-.02970
	GRADIENT	.02297	-.02142	.02211	-.00057	-.00855	.02363	-.00492	.00000	-.00252

RUN NO. 354/0 RM/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFO	CY	CYN	CBL	CYV	CYV	KCP/L	Q	CBLV
1.200	-4.955	.05590	.05160	.01660	-.00780	-.00050	.00420	1.68230	572.70000	-.00120
1.202	-2.971	.05920	.01220	.02070	-.01180	-.01950	.01340	1.58300	572.70000	-.00710
1.201	.011	.06180	-.04150	.02380	-.01610	-.04260	.02360	1.48200	572.70000	-.01420
1.198	3.105	.06260	-.09320	.02660	-.01950	-.06560	.03350	1.39940	572.70000	-.02110
1.199	5.173	.06210	-.13210	.02870	-.02180	-.08190	.04070	1.32920	572.70000	-.02600
1.197	6.607	.06300	-.15880	.02980	-.02410	-.09400	.04610	1.31300	572.70000	-.02950
	GRADIENT	.00081	-.01814	.00120	-.00143	-.00810	.00358	-.03455	.00000	-.00245

ARC 11-747 QAS3A B C M F M V NOM. RN/L

(AEJ539) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. 2NRP = 32.3010 IN.  
 LREF = 14.2440 IN. YNRP = .0220 IN.  
 BREF = 20.1024 IN. 2NRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEWON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 357/0 RN/L = 3.75 GRADIENT INTERVAL = -.5.00/ 5.00

MACH	BETA	CLMFWD	CY	CYN	CBL	CYV	XCP/L	Q	CBLV
.901	-5.040	.05720	.04750	.01840	-.02350	.01850	.58590	616.00000	-.00400
.901	-3.014	.05740	.00970	.01960	-.00750	.01410	.58580	616.00000	-.00790
.899	.023	.05990	-.04420	.02150	-.01280	.02150	.58270	616.00000	-.01330
.900	3.068	.05720	-.10120	.02500	-.01970	.03000	.58550	616.00000	-.01960
.899	5.101	.05740	-.14080	.02760	-.02480	.03670	.58490	616.00000	-.02430
.900	7.132	.05750	-.17520	.02670	-.02710	.04020	.58480	616.00000	-.02660
	GRADIENT	-.00003	-.01823	.00009	-.00204	.00261	-.00005	.00000	-.00192



DATE 16 JUL 74 TABULATED SOURCE DATA - 0453A

(AEJ060) (12 MAR 74)

ARC 11-747 0453A B C M F W Y NOM. RNVL

# REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3010 IN. ALPHA = 25.000 ELEWON = .000  
 LREF = 14.2440 IN. WREF = .00000 IN. AILRON = .000 BDFLAP = -11.700  
 BREF = 20.1004 IN. WREF = 11.2500 IN. SPOBRK = 25.000 RUDDER = -25.000  
 SCALE = .0020 SCALE ELEV-L = .000 ELEV-R = .000

# PARAMETRIC DATA

RUN NO. 350/ 0 RNVL = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYV	XP/L	q	CBLV
.597	-5.013	.03840	.04320	.01870	-.00390	-.01690	.01150	.61830	476.50000	-.00570
.599	-2.998	.03860	.02460	.02140	-.00680	-.03380	.01840	.61820	476.50000	-.01070
.599	.012	.03850	.04300	.02540	-.01410	-.05010	.02570	.61830	476.50000	-.01610
.597	3.058	.03720	-.10550	.02950	-.06610	-.06610	.03270	.61870	476.50000	-.02140
.597	5.081	.03780	-.14510	.03350	-.02610	-.08120	.03940	.61840	476.50000	-.02630
.598	7.118	.03480	-.16940	.02920	-.02730	-.08530	.04020	.61950	476.50000	-.02680
	GRADIENT	-.00223	-.01818	.00130	-.00192	-.00533	.00236	.00000	.00000	-.00177

RUN NO. 358/ 0 RNVL = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYV	XP/L	q	CBLV
.912	-5.071	.06750	.04250	.04030	-.00280	-.04170	.01850	.60880	616.30000	-.00960
.920	-3.035	.05540	.00390	.03250	-.00710	-.04030	.01390	.61000	616.30000	-.01120
.921	.017	.05250	-.04770	.02250	-.01190	-.04320	.02280	.61200	616.30000	-.01400
.923	3.046	.05280	-.03700	.01240	-.01790	-.04580	.02550	.61180	616.30000	-.01660
.912	5.129	.05340	-.12430	.00530	-.02190	-.04480	.02610	.61150	616.30000	-.01790
.899	7.181	.05360	-.14970	-.00500	-.02250	-.04010	.02410	.61140	616.30000	-.01700
	GRADIENT	-.00242	-.01648	-.00328	-.00176	-.00292	.00091	.00016	.00000	-.00288

RUN NO. 355/ 0 RNVL = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMFD	CY	CYN	CBL	CYV	CYV	XP/L	q	CBLV
1.199	-5.041	-.05150	.00330	.02670	-.00300	-.03410	.01550	.65030	573.10000	-.00770
1.201	-3.020	-.05540	.01760	.02400	-.00500	-.03440	.01710	.65150	573.10000	-.00930
1.197	.014	-.05540	-.03310	.01990	-.00950	-.03700	.02050	.65140	573.10000	-.01190
1.197	3.074	-.05190	-.00290	.01490	-.01500	-.03870	.02300	.65040	573.10000	-.01430
1.198	5.111	-.04810	-.11410	.01070	-.01760	-.03800	.02370	.64930	573.10000	-.01560
1.198	7.152	-.04650	-.14260	.00540	-.02030	-.03820	.02360	.64890	573.10000	-.01630
	GRADIENT	.00258	-.01649	-.00149	-.00164	-.00071	.00097	-.00018	.00000	-.00282

ARC 11-747 0453A B C M F W V NOM. RM/L

(AEJ061) (12 MAR 74)

## REFERENCE DATA

SECF = 2.4210 SA.FT.  
 LSEF = 14.2440 IN.  
 BSEF = 28.1074 IN.  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEV-0 = .0000  
 ALLR0N = .0000 BDFLAP = -11.7000  
 SPBR0 = 85.0000 RUDDER = .0000  
 ELEV-1 = .0000 ELEV-2 = .0000

RUN NO. 345/ 0 RM/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWD	CY	CYN	CBL	CYV	CYNV	KCF/L	Q	CBV
.599	-4.936	.09170	.09170	-.02690	.09200	.04070	-.01730	.97670	481.40000	.01210
.598	-2.945	.09460	.09470	-.02280	-.02070	.02000	-.00850	.97320	481.40000	.00610
.597	.030	.09670	-.02260	.02010	-.02210	-.05010	.00220	.95010	481.40000	.01020
.597	3.111	.09560	-.05110	.02210	-.02280	-.02070	.00220	.94830	481.40000	-.00550
.596	5.168	.09220	-.09380	.02680	-.02440	-.03960	.01670	.94560	481.40000	-.01110
.600	6.740	.08810	-.12160	.02970	-.02690	-.05530	.02360	.94530	481.40000	-.01570
GRADIENT		.09246	-.03745	.02015	-.02756	-.00741	.00313	-.00420	-.00000	-.00214

RUN NO. 346/ 0 RM/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWD	CY	CYN	CBL	CYV	CYNV	KCF/L	Q	CBV
.590	-4.947	.11720	.10690	-.01260	.10240	.04670	-.02030	1.01500	605.90000	.01380
.594	-2.361	.12350	.05960	-.01590	-.02260	.02440	-.01040	1.02440	605.90000	.00730
.592	.026	.12740	.02760	-.02270	-.02270	-.02260	.00070	1.00700	605.90000	.00030
.591	3.701	.12520	-.05310	.02460	-.02300	-.02410	.00990	.99800	605.90000	-.00660
.590	5.161	.11860	-.11280	.01160	-.02470	-.04540	.01930	.99120	605.90000	-.00130
.590	6.713	.11260	-.13550	.01540	-.02670	-.06170	.02660	.97530	605.90000	-.01170
GRADIENT		.09656	-.02039	.01276	-.02762	-.02466	.00369	-.00265	.00000	-.00249

RUN NO. 343/ 0 RM/L = 3.00 GRADIENT INTERVAL = 5.00/ 5.00

MACH	BETA	CLFWD	CY	CYN	CBL	CYV	CYNV	KCF/L	Q	CBV
1.201	-4.945	.06930	.09450	-.04700	.09570	.04020	-.01050	1.49020	573.20000	.01270
1.201	-2.356	.09060	.05270	-.04280	.02160	-.02140	-.00960	1.45700	573.20000	.01690
1.201	.028	.09460	-.02280	-.04280	-.04200	-.04010	.00000	1.33200	573.20000	.00030
1.196	3.120	.09460	-.05210	.04270	-.04510	-.02350	.00940	1.33200	573.20000	-.00640
1.204	5.178	.09260	-.09110	.01590	-.04610	-.04140	.01000	1.30000	573.20000	-.01210
1.201	6.734	.09100	-.12180	.04420	-.04080	-.05560	.02460	1.30000	573.20000	-.01630
GRADIENT		.09265	-.03096	.02115	-.04010	-.00769	.00046	-.02222	-.00000	-.00234



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0-53A B C H F W V NDM. RN/L

(AEJ062) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 341/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLMF/D	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.902	-5.031	.08960	.09530	-.00700	.01030	.03350	-.01520	.55570	607.20000	.01090
.900	-3.007	.09110	.03460	-.00380	.00550	.01870	-.00850	.55390	607.20000	.00630
.902	.030	.09010	-.00180	-.00120	-.00230	-.00010	-.00020	.55390	607.20000	.00040
.900	3.078	.08910	-.00350	.00130	-.00670	-.01860	.00810	.55520	607.20000	-.00560
.898	5.103	.08910	-.00600	.00430	-.01170	-.03370	.01480	.55410	607.20000	-.01030
.902	7.137	.08290	-.13650	.00750	-.01640	-.00500	.02230	.55990	607.20000	-.01520
	GRADIENT	-.00033	-.01776	.00084	-.00200	-.00613	.00273	.00021	.00000	-.00196

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ARC 11-747 0453A B C H F M V NOM. RN/L

(AEJ563) (12 MAR 74)

## PARAMETRIC DATA

ALPHA = 20.000 ELEVOM = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 346/0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.599	-5.001	.06830	.09340	-.00710	.01010	.02820	-.01290	.60620	479.70000	.00960
.599	-2.988	.06680	.05910	-.00590	.00530	.01450	-.00630	.60700	479.70000	.00530
.598	.027	.06590	.06100	-.00160	.00250	-.00110	.00720	.60750	479.70000	-.00010
.597	3.068	.06780	-.05240	.00280	-.00600	.01680	.00720	.60600	479.70000	-.00510
.600	5.094	.06900	-.06820	.00540	-.01130	-.02960	.01290	.60580	479.70000	-.00910
.598	7.120	.06370	-.12540	.00820	-.01630	-.04590	.02020	.60800	479.70000	-.01420
	GRADIENT	.06013	-.01841	.00144	-.02197	-.00517	.00233	-.00007	.00000	-.00172

RUN NO. 342/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
.898	-5.056	.08450	.08330	.01910	.01630	-.00520	-.00100	.59660	610.40000	.00270
.903	-3.024	.08480	.05310	.00760	.00400	.00170	-.00260	.59820	610.40000	.00260
.901	.030	.08360	.02080	-.00310	.00040	.00160	-.00080	.59890	610.40000	.00080
.901	3.105	.08290	-.04930	-.01270	-.00450	.00030	.00110	.59940	610.40000	-.00140
.903	5.138	.08230	-.07340	-.01950	-.00880	.00220	.00160	.59920	610.40000	-.00230
.900	7.138	.07710	-.10710	-.02680	-.01050	.00191	.00260	.60150	610.40000	-.00360
	GRADIENT	-.00031	-.01671	-.00331	-.00139	-.00023	.00060	.00020	.00000	-.00069

RUN NO. 344/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CLFWO	CY	CYN	CBL	CYV	CYNV	XCP/L	Q	CBLV
1.200	-5.033	-.02230	.09210	.00620	.00890	.00010	-.00400	.64030	573.20000	.00420
1.204	-3.013	-.02640	.05490	.00310	.00690	.00210	-.00340	.64180	573.20000	.00290
1.202	.027	-.02960	.00330	-.00070	.00220	-.00020	.00051	.64290	573.20000	.00010
1.199	3.082	-.02660	-.04730	-.00480	.00040	-.00350	.00410	.64190	573.20000	-.00280
1.198	5.116	-.02480	-.07900	-.00800	-.00640	-.00500	.00510	.64130	573.20000	-.00440
1.203	7.157	-.02390	-.11000	-.01230	-.00960	-.00510	.00600	.64110	573.20000	-.00560
	GRADIENT	-.00006	-.01677	-.00130	-.00179	-.00126	.00023	.00002	.00000	-.00094



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(0BJ002) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1014 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -10.000 ELEV-R = -10.000

RUN NO. 114/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHEO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.596	-7.08	-0.0280	.11980	.05290	.17280	-0.03530	-0.03000	-0.03570	-0.04680	.00670	476.700000	
.599	.310	-0.03360	.11700	.05070	.16770	-0.03490	-0.04990	-0.03320	-0.04610	.00740	476.700000	
.599	1.361	-0.03290	.11700	.05000	.16700	-0.03480	-0.04990	-0.03310	-0.04680	.00700	476.700000	
.599	1.863	-0.03330	.11680	.04970	.16650	-0.03480	-0.05020	-0.03320	-0.04660	.00740	476.700000	
.600	3.833	-0.03400	.11450	.04910	.16360	-0.03510	-0.05070	-0.03300	-0.04690	.00870	476.700000	
.599	5.845	-0.03300	.11320	.04740	.16170	-0.03510	-0.05080	-0.03350	-0.04740	.00990	476.700000	
.600	7.893	-0.03250	.11250	.04450	.15700	-0.03490	-0.05090	-0.03360	-0.04770	.01120	476.700000	
.598	9.934	-0.03240	.11090	.04000	.14990	-0.03520	-0.05090	-0.03360	-0.04770	.01120	476.700000	
.598	12.960	-0.03270	.10510	.03060	.13570	-0.03560	-0.05120	-0.03600	-0.04810	.00530	476.700000	
.598	16.010	-0.03280	.09410	.01190	.11690	-0.03560	-0.05120	-0.03610	-0.04790	-.00320	476.700000	
.598	19.080	-0.03240	.07050	.00320	.07370	-0.03660	-0.05190	-0.03720	-0.04880	-.01840	476.700000	
.599	22.080	-0.03250	.06450	-.00280	.06170	-0.03930	-0.05460	-0.03930	-0.05200	-.02900	476.700000	
.597	25.080	-0.03150	.04120	-.00660	.03460	-0.04200	-0.05800	-0.04280	-0.05570	-.03760	476.700000	
.598	28.980	-0.03180	.03690	.00600	.04490	-0.04870	-0.06400	-0.04910	-0.06180	-.04080	476.700000	
GRADIENT	.00021	-.00005	-.00077	-.00005	-.00181	.00003	-.00017	.00013	-.00007	.00040	.00000	

RUN NO. 113/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHEO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-.729	-0.03430	.14600	.06540	.21140	-0.03430	-0.04810	-0.03430	-0.04390	.01600	643.200000	
.801	.427	-0.03390	.14700	.06540	.21240	-0.03420	-0.04780	-0.03400	-0.04380	.01840	643.200000	
.800	1.437	-0.03420	.14500	.06370	.20870	-0.03370	-0.04800	-0.03410	-0.04340	.01770	643.200000	
.800	1.949	-0.03420	.14410	.06300	.20700	-0.03350	-0.04750	-0.03350	-0.04330	.01790	643.200000	
.801	3.910	-0.03520	.14330	.06230	.20560	-0.03390	-0.04760	-0.03360	-0.04270	.02080	643.200000	
.797	5.919	-0.03460	.14150	.05760	.19910	-0.03380	-0.04770	-0.03340	-0.04360	.02230	643.200000	
.800	7.976	-0.03430	.13740	.04490	.18230	-0.03350	-0.04800	-0.03370	-0.04360	.02440	643.200000	
.802	9.951	-0.03400	.13470	.02980	.16450	-0.03390	-0.04820	-0.03410	-0.04390	.02630	643.200000	
.797	13.000	-0.03400	.12760	.02560	.15320	-0.03350	-0.04860	-0.03390	-0.04420	.02170	643.200000	
.799	16.070	-0.03350	.10730	.02210	.12940	-0.03360	-0.04980	-0.03370	-0.04630	.01120	643.200000	
.797	19.150	-0.03480	.10680	.02270	.12950	-0.03630	-0.05400	-0.03680	-0.04880	.00770	643.200000	
.799	22.240	-0.03680	.09380	.02380	.12120	-0.03950	-0.05910	-0.04030	-0.05150	.00320	643.200000	
.800	25.330	-0.03190	.07980	.02730	.10710	-0.04560	-0.06160	-0.04490	-0.05020	.00690	643.200000	
.795	29.300	-0.01100	.05290	.01600	.06890	-0.05360	-0.06820	-0.05330	-0.05720	.01640	643.200000	
GRADIENT	.00021	-.00005	-.00073	-.00076	-.00149	.00011	-.00008	.00016	-.00007	.00040	.00000	

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ002) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0920 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AILRON = .000 BCLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -10.000 ELEV-R = -10.000

RUN NO. 112/ 5 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.899	-7.14	-0.0610	.19250	.08380	.27630	-.03670	-.05380	-.03530	-.04900	.02630	614.20000
.904	.447	-0.0630	.19240	.08150	.27390	-.03730	-.05440	-.03560	-.04980	.02280	614.20000
.905	1.471	-0.0700	.19120	.07820	.26340	-.03680	-.05460	-.03520	-.04930	.02350	614.20000
.904	1.936	-0.0630	.18830	.07510	.26360	-.03650	-.05430	-.03490	-.04950	.02270	614.20000
.904	3.892	-0.0570	.18250	.06390	.24650	-.03490	-.05360	-.03420	-.04850	.02300	614.20000
.903	5.862	-0.0510	.17810	.04480	.22290	-.03480	-.05210	-.03360	-.04820	.02370	614.20000
.902	7.910	-0.0460	.17830	.02910	.20740	-.03440	-.05200	-.03330	-.04850	.02250	614.20000
.901	9.846	-0.0390	.17420	.03090	.20510	-.03460	-.05330	-.03460	-.05030	.01550	614.20000
.901	12.920	-0.0430	.15600	.03600	.19200	-.03490	-.05510	-.03400	-.05160	.00960	614.20000
.902	15.990	-0.0440	.13510	.02960	.16460	-.03830	-.05880	-.03780	-.05480	.01620	614.20000
.903	19.070	-0.0510	.12420	.02120	.14540	-.04600	-.06480	-.04530	-.05950	.02540	614.20000
.899	21.100	-0.0570	.11570	.02410	.13370	-.05030	-.06720	-.04930	-.06070	.02960	614.20000
.904	22.150	-0.0660	.10490	.02970	.13460	-.05440	-.06720	-.05350	-.05950	.04350	614.20000
.901	25.280	-0.0420	.08280	.02810	.11090	-.06330	-.05870	-.05650	-.05470	.03730	614.20000
.902	29.300	-0.0370	.04360	.02230	.06590	-.07570	-.05640	-.07260	-.05090	.06550	614.20000
GRADIENT			-.06227	-.09439	-.02664	.00743	.07006	.00027	.00014	-.00034	.00000

RUN NO. 110/ 5 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
1.048	-6.72	-0.04870	.26250	.03890	.30140	-.08350	-.08490	-.08390	-.08190	.01590	534.80000
1.054	.367	-0.05720	.25680	.03070	.34760	-.08460	-.08390	-.08380	-.08150	.01880	534.80000
1.054	1.373	-0.05750	.25210	.02070	.33270	-.08810	-.08470	-.08330	-.08200	.02030	534.80000
1.053	1.885	-0.05760	.24370	.07600	.32570	-.08790	-.08460	-.08310	-.08190	.02420	534.80000
1.056	3.820	-0.05960	.23760	.06280	.30040	-.08540	-.08370	-.08070	-.07880	.02820	534.80000
1.050	5.766	-0.01160	.23240	.04880	.28120	-.08450	-.08280	-.07850	-.07730	.02880	534.80000
1.047	7.786	-0.01040	.21220	.02310	.24530	-.08180	-.08070	-.07720	-.07490	.03690	534.80000
1.047	9.763	-0.01210	.18730	.01330	.20650	-.08260	-.07880	-.07620	-.07380	.06540	534.80000
1.053	12.820	-0.01830	.14360	.00760	.15130	-.08140	-.06960	-.06820	-.06450	.08300	534.80000
1.048	15.840	-0.01870	.09310	-.00530	.08780	-.06270	-.06020	-.05130	-.05290	.08020	534.80000
1.051	18.690	-0.02840	.06750	-.01800	.04960	-.04770	-.04970	-.04240	-.04670	.06290	534.80000
1.054	21.990	-0.02400	.02910	-.02800	.06120	-.04280	-.05020	-.04460	-.04880	.04210	534.80000
1.048	24.990	-0.02430	-.00250	-.02200	-.02440	-.09750	-.07060	-.06650	-.05750	.02600	534.80000
1.053	29.060	-0.00130	-.03620	-.01570	-.05190	-.09320	-.07070	-.09260	-.07200	-.01250	534.80000
GRADIENT			-.09427	-.09416	-.01365	.00088	.00019	.00072	.00063	.00279	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V NOM. RN/L

(BEJ002) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEV-N = -10.000  
 AILRON = .0000 BDFLAP = -11.700  
 SPCBRK = 25.000 RUDDER = .000  
 ELEV-L = -10.000 ELEV-R = -10.000

RUN NO. 109/5 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CH E	CH E	CH E	CH U	CH L	CH R	CH F	CH F	Q
1.201	-0.672	-0.01710	.24890	.06690	.31490	-0.06930	-0.07080	-0.05860	-0.06490	.03490	564.700000
1.203	.279	-0.00910	.24010	.05780	.29790	-0.06280	-0.06800	-0.05680	-0.06470	.04320	564.700000
1.204	1.302	-0.00900	.23030	.04460	.27890	-0.06110	-0.06750	-0.05550	-0.06410	.04920	564.700000
1.205	1.789	-0.00880	.22590	.04490	.27090	-0.05980	-0.06710	-0.05440	-0.06370	.05090	564.700000
1.198	3.713	-0.00750	.20670	.03640	.24310	-0.05710	-0.06620	-0.05240	-0.06330	.06140	564.700000
1.197	5.691	-0.00620	.19020	.02890	.21910	-0.05480	-0.06550	-0.05070	-0.06330	.06850	564.700000
1.190	7.727	-0.00750	.17470	.01730	.19210	-0.05280	-0.06550	-0.04830	-0.06230	.06840	564.700000
1.201	9.701	-0.00750	.15270	.00760	.16030	-0.05260	-0.06510	-0.04810	-0.06200	.06290	564.700000
1.201	12.720	-0.00780	.12040	-.00220	.11840	-0.05170	-0.06410	-0.04700	-0.06090	.04740	564.700000
1.195	15.790	-0.00780	.09760	-.01150	.09420	-0.05000	-0.06610	-0.05080	-0.06260	.03220	564.700000
1.197	18.800	-0.00930	.07070	-.02950	.06690	-0.05670	-0.06690	-0.05170	-0.06250	.02130	564.700000
1.195	21.840	-0.01460	-.00000	-.03990	-.04290	-0.05360	-0.06210	-0.05070	-0.06040	.00660	564.700000
1.195	24.870	-.00890	-.03720	-.03280	-.07600	-.05090	-.05220	-.05310	-.05890	-.01760	564.700000
1.194	28.930	-.00120	-.05920	-.04340	-.11260	-.07640	-.05310	-.07530	-.05300	-.04370	564.700000
	GRADIENT	.00179	-.00946	-.00656	-.01642	.00263	.00034	.00141	.00039	.00587	.000000



TABLED SOURCE DATA - 0453A

DATE 06 JUL 74

ARC 11-747 0453A B C H F W V NOM. RN/L

(BEJ003) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. YMRP = 11.2500 IN.  
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .0000 ELEVON = 15.0000  
AILRON = .0000 BDFLAP = -11.7000  
SPDRK = 25.0000 RUDDER = .0000  
ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 162/0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	q
1.033	-1.616	-0.0710	-0.02520	-0.02760	-0.05280	-0.03470	-0.05270	-0.03130	-0.04900	-0.00190	611.10000
1.034	-1.06	-0.0610	-0.02770	-0.03140	-0.05800	-0.03440	-0.05270	-0.03120	-0.04990	-0.00180	611.10000
1.034	-1.06	-0.0620	-0.03010	-0.03250	-0.06260	-0.03430	-0.05260	-0.03130	-0.04940	.00030	611.10000
1.033	1.439	-0.0560	-0.03160	-0.03360	-0.06320	-0.03390	-0.05250	-0.03130	-0.04950	.00060	611.10000
1.031	3.354	-0.05540	-0.03730	-0.03740	-0.07460	-0.03200	-0.05090	-0.02970	-0.04780	.00260	611.10000
1.030	5.332	-0.0510	-0.04640	-0.05160	-0.09800	-0.02980	-0.04840	-0.02770	-0.04540	.00300	611.10000
1.036	7.371	-0.0540	-0.06620	-0.06280	-0.12310	-0.02810	-0.04730	-0.02560	-0.04440	.00600	611.10000
1.031	9.404	-0.0520	-0.09520	-0.07180	-0.16690	-0.02690	-0.04760	-0.02490	-0.04430	.01900	611.10000
1.034	12.440	-0.0480	-0.13380	-0.07770	-0.21150	-0.02610	-0.04800	-0.02430	-0.04510	.03370	611.10000
1.039	15.500	-0.0500	-0.17620	-0.09470	-0.27190	-0.02840	-0.05290	-0.02720	-0.04900	.04540	611.10000
1.037	18.570	-0.0320	-0.15120	-0.10430	-0.25550	-0.03760	-0.06360	-0.03410	-0.05790	.05040	611.10000
1.039	21.720	-0.01020	-0.10800	-0.08740	-0.22820	-0.05340	-0.07350	-0.04880	-0.06780	.05040	611.10000
1.032	24.920	-0.01760	-0.14530	-0.07530	-0.20150	-0.06830	-0.08980	-0.06380	-0.05680	.02160	611.10000
1.038	28.890	-0.01140	-0.17770	-0.08080	-0.25860	-0.07950	-0.06640	-0.07500	-0.05960	.02830	611.10000
GRADIENT		.00037	-0.00295	-0.00233	-0.00527	.00067	.00045	.00038	.00038	.00119	.00001

RUN NO. 161/0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	q
1.033	-1.636	-0.01190	-0.12120	-0.06490	-0.18620	-0.06830	-0.07660	-0.05960	-0.07440	.03540	627.10000
1.034	-1.06	-0.01040	-0.12140	-0.06680	-0.18820	-0.06770	-0.07640	-0.05960	-0.07420	.03540	627.10000
1.034	-1.06	-0.01150	-0.12020	-0.06970	-0.18990	-0.06540	-0.07650	-0.05760	-0.07280	.03750	627.10000
1.033	1.482	-0.01160	-0.12290	-0.07130	-0.19320	-0.06470	-0.07590	-0.05700	-0.07200	.03950	627.10000
1.030	3.324	-0.01270	-0.12810	-0.07680	-0.20490	-0.06280	-0.07400	-0.05470	-0.06940	.04200	627.10000
1.034	5.264	-0.01390	-0.13650	-0.08690	-0.22340	-0.06120	-0.07170	-0.05170	-0.06630	.04040	627.10000
1.034	7.289	-0.01450	-0.14310	-0.09380	-0.23680	-0.05560	-0.06750	-0.04690	-0.06180	.03620	627.10000
1.030	9.252	-0.01520	-0.15940	-0.10420	-0.26350	-0.05180	-0.06210	-0.04190	-0.05670	.02970	627.10000
1.047	12.280	-0.01070	-0.19190	-0.12020	-0.31180	-0.04410	-0.05390	-0.03740	-0.04990	.02630	627.10000
1.048	15.390	-0.00920	-0.23870	-0.12870	-0.36740	-0.04280	-0.05030	-0.03680	-0.04720	.02420	627.10000
1.048	18.430	-0.01010	-0.27050	-0.13730	-0.40780	-0.04520	-0.05070	-0.03630	-0.04750	.01540	627.10000
1.048	21.500	-0.01190	-0.30880	-0.14180	-0.43070	-0.05000	-0.05030	-0.04090	-0.04740	.01150	627.10000
1.052	24.620	-0.02210	-0.33370	-0.13160	-0.36520	-0.09010	-0.06740	-0.07090	-0.06450	.03450	627.10000
1.048	28.730	-0.01270	-0.24670	-0.11620	-0.36290	-0.08630	-0.06840	-0.07670	-0.06520	.05790	627.10000
GRADIENT		.00051	-0.00176	-0.00232	-0.00470	.00143	.00065	.00131	.00131	.00180	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V NOM. RN/L

(BEJ004) ( 12 MAR 74 )

## REFERENCE DATA

SHEP = 2.4210 SJ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRFLN = 5.000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 5.000 ELEV-R = -5.000

RUN NO. 119/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHLR	CHLF	Q
.597	-1.653	.003300	.08230	.03380	.11610	-.02470	-.04680	-.02350	-.04510	476.50000
.599	-1.171	-.00260	.08710	.03360	.11570	-.02420	-.04650	-.02340	-.04480	476.50000
.600	1.203	-.00270	.08180	.03340	.11520	-.02430	-.04610	-.02330	-.04440	476.50000
.600	1.712	-.00290	.08250	.03350	.11600	-.02410	-.04640	-.02320	-.04440	476.50000
.601	3.695	-.00270	.08250	.03430	.11680	-.02410	-.04640	-.02320	-.04450	476.50000
.600	5.760	-.00270	.08250	.03230	.11490	-.02380	-.04640	-.02330	-.04440	476.50000
.598	7.749	-.00190	.08110	.02950	.11060	-.02380	-.04640	-.02360	-.04470	476.50000
.598	9.751	-.00260	.07740	.02490	.10230	-.02380	-.04630	-.02330	-.04400	476.50000
.598	12.770	-.00140	.06880	.01500	.08370	-.02380	-.04590	-.02350	-.04490	476.50000
.600	15.830	-.00130	.05430	.00510	.04910	-.02430	-.04560	-.02370	-.04470	476.50000
.597	18.910	-.00240	.02760	-.01140	.01140	-.02520	-.04610	-.02480	-.04610	476.50000
.598	21.940	.00260	.02820	-.02270	.00550	-.02680	-.04840	-.02730	-.04850	476.50000
.599	24.990	.00350	.02740	-.02560	-.02030	-.02990	-.05240	-.03080	-.05220	476.50000
.598	28.980	-.00510	.00100	-.00870	-.00780	-.03970	-.06480	-.03810	-.06130	476.50000
GRADIENT		.00003	.00007	.00012	.00019	.00011	.00008	.00007	.00014	.00000

RUN NO. 118/ 0 RN/L = 4.20 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHLR	CHLF	Q
.801	-1.666	-.00390	.09040	.03910	.12950	-.02470	-.04650	-.02310	-.04420	638.60000
.802	.219	-.00330	.09140	.03940	.13080	-.02420	-.04630	-.02320	-.04420	638.60000
.803	1.269	-.00350	.09090	.03880	.12970	-.02420	-.04630	-.02290	-.04410	638.60000
.800	1.764	-.00390	.09120	.03870	.12990	-.02430	-.04670	-.02290	-.04420	638.60000
.799	3.723	-.00350	.09240	.03960	.13200	-.02450	-.04620	-.02300	-.04420	638.60000
.797	5.728	-.00280	.09140	.03630	.12770	-.02410	-.04590	-.02290	-.04430	638.60000
.800	7.784	-.00220	.09120	.02860	.11980	-.02420	-.04630	-.02360	-.04470	638.60000
.800	9.799	-.00290	.09120	.01620	.09640	-.02480	-.04650	-.02350	-.04490	638.60000
.801	12.870	-.00210	.07940	.00930	.08870	-.02430	-.04670	-.02380	-.04510	638.60000
.801	15.880	-.00120	.05530	.00680	.05620	-.02420	-.04830	-.02400	-.04710	638.60000
.800	18.590	-.00210	.04510	-.01220	.03290	-.02580	-.05190	-.02610	-.04960	638.60000
.801	22.100	-.00540	.02940	-.00650	.02390	-.03050	-.05800	-.03040	-.05270	638.60000
.798	25.130	-.01470	.01320	-.00800	.00720	-.03830	-.06770	-.03630	-.05490	638.60000
.797	29.190	-.00810	.00350	-.00530	-.00190	-.04350	-.07020	-.04320	-.06230	638.60000
GRADIENT		.00003	.00009	.00006	.00005	.00002	.00006	.00004	.00000	.00000

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YREF = 32.3010 IN.  
LREF = 14.2440 IN. YREF = .0000 IN.  
BREF = 26.1004 IN. ZREF = 11.2500 IN.  
SCALE = .0300 SCALE

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RUN NO. = 117.0   RN/L = 3.73   GRADIE * INTERVAL = -5.067   5.000
XREF = 32.3015 IN.
YREF = 1.38 IN.
ZREF = 11.2500 IN.
BETA =
ALTRON =
SPDRK =
ELEV-L =

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```
BETA = .000 ELEV-N = .000
ALION = 5.000 BDFAP = -11.700
SPGRK = 25.000 RUDDR = .000
ELEV-L = 5.000 ELEV-R = -5.000
```

## PARAMETRIC DATA

MACH	ALPHA	CHR	CHET	CHFD	CHET	C	CHLL	CHUR	CHLR	CHCF	Q
.899	-.671	-.06490	.12420	.07260	.17680	-.00000	-.05220	-.02820	-.05920	.00300	614.20000
.903	.215	-.00440	.13100	.09360	.18460	-.029	-.05200	-.02810	-.04940	.00060	614.20000
.902	.1246	-.00550	.12920	.07490	.17510	-.0293	-.05220	-.02790	-.04860	.00330	614.20000
.898	1.763	-.00470	.12660	.07720	.16380	-.02890	-.05120	-.02790	-.04730	.00330	614.20000
.906	.00540	-.00540	.12640	.03320	.16560	-.02860	-.05190	-.02650	-.04650	.00340	614.20000
.905	5.684	-.00460	.12510	.02480	.14390	-.02790	-.05070	-.02630	-.04760	.01210	614.20000
.902	7.722	-.00410	.12350	.03280	.16230	-.02740	-.04960	-.02280	-.04670	.01620	614.20000
.901	.9720	-.00370	.12580	.03130	.15710	-.02190	-.04910	-.02110	-.04580	.02540	614.20000
.901	12.770	-.00360	.11950	.02310	.13250	-.02130	-.04940	-.02050	-.04660	.03510	614.20000
.902	15.820	-.00510	.07380	.00820	.08210	-.02460	-.05440	-.02370	-.05030	.03680	614.20000
.899	18.330	-.00860	.05720	-.00510	.06210	-.03280	-.06350	-.03750	-.05690	.0760	614.20000
.897	22.010	-.00940	.03050	.00220	.03270	-.04200	-.06670	-.04720	-.06110	.08160	614.20000
.900	25.120	-.01240	-.00320	-.00540	-.02860	-.05460	-.06260	-.04900	-.05530	.06250	614.20000
.900	29.160	-.00980	-.00370	-.01810	-.06870	-.06510	-.05920	-.06540	-.05270	.05210	614.20000
GRADIENT	-.00015	-.00023	-.00033	-.00033	-.00355	-.00032	.00009	.00039	-.00022	-.00032	-.00000

[illegible]



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM, RN/L

(02.004) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 ALURON = 5.0000 BDFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 5.0000 ELEV-R = -5.0000

RUN NO. 115/0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.202	-0.662	-0.00960	.16200	-0.06560	-0.06670	-0.05890	-0.06370	.04610	567.10000
1.200	.132	-0.00820	.15560	-0.06400	-0.06540	-0.05870	-0.06250	.04560	567.10000
1.200	1.132	-0.00860	.14560	-0.06280	-0.06450	-0.05710	-0.06140	.04400	567.10000
1.199	1.645	-0.00830	.14160	-0.06210	-0.06460	-0.05690	-0.06140	.04390	567.10000
1.195	3.560	-0.00820	.12590	-0.06020	-0.06350	-0.05490	-0.06060	.04170	567.10000
1.199	5.525	-0.00750	.11030	-0.05860	-0.06300	-0.05340	-0.06070	.03710	567.10000
1.199	7.574	-0.00820	.10150	-0.05750	-0.06230	-0.05240	-0.05950	.03260	567.10000
1.197	9.554	-0.00810	.08390	-0.05590	-0.06210	-0.05180	-0.05910	.02610	567.10000
1.198	12.570	-0.00660	.04630	-0.05370	-0.05930	-0.04860	-0.05780	.01320	567.10000
1.197	15.640	-0.00650	-0.00900	-0.05530	-0.06110	-0.05150	-0.05940	.00350	567.10000
1.194	18.680	-0.00760	-0.04940	-0.05820	-0.06350	-0.05340	-0.06070	-0.0260	567.10000
1.195	21.710	-0.00590	-0.06780	-0.05640	-0.05920	-0.05160	-0.05810	-0.01590	567.10000
1.194	24.750	.00700	-0.09750	-0.05310	-0.05140	-0.05270	-0.05790	-0.03710	567.10000
1.196	28.790	-0.03380	-0.12650	-0.04200	-0.04050	-0.06190	-0.04680	-0.06180	567.10000
GRADIENT	.00224	-0.00663	-0.00742	.00125	.00070	.00099	.00070	-0.00107	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 274

ARC 11-747 QAS3A B C M F M V NDM. RM/L

(BEJ005) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. ZMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 AIRLON = 5.0000 BDFAP = -11.700  
 SPDRK = 25.0000 RUPER = .0000  
 ELEV-L = -5.0000 ELEV-R = -15.000

RUN NO. 159/ 0 RM/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CH	CHT	CHD	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.600	-1.704	-.00130	.16150	.07450	.23510	-.02870	-.04220	-.02830	-.04120	.00670	483.20000
.600	.307	-.00150	.15990	.07220	.23210	-.02810	-.04270	-.02820	-.04120	.00690	483.20000
.600	1.336	-.00180	.15970	.07020	.22990	-.02840	-.04290	-.02830	-.04120	.00740	483.20000
.590	1.442	-.00170	.15940	.06800	.22820	-.02850	-.04300	-.02840	-.04130	.00680	483.20000
.590	3.792	-.00160	.15800	.06540	.22340	-.02820	-.04270	-.02810	-.04130	.00670	483.20000
.597	5.804	-.00200	.15560	.06210	.21780	-.02840	-.04350	-.02810	-.04190	.01000	483.20000
.597	7.461	-.00160	.15350	.05850	.21190	-.02900	-.04320	-.02860	-.04200	.01110	483.20000
.590	9.463	-.00120	.14840	.05200	.20430	-.02870	-.04360	-.02870	-.04240	.00820	483.20000
.590	12.970	-.00180	.14120	.03810	.17930	-.02930	-.04360	-.02870	-.04240	.00500	483.20000
.597	15.973	-.00230	.13380	.02370	.15450	-.02940	-.0450	-.02920	-.04290	-.00330	483.20000
.593	19.020	-.00220	.10660	.01640	.12290	-.02960	-.04290	-.02960	-.04270	-.01640	483.20000
.590	22.050	-.00260	.09890	.01320	.11210	-.03190	-.04590	-.03240	-.04630	-.02520	483.20000
.597	25.070	-.00260	.07500	.01770	.09270	-.03440	-.04510	-.03460	-.04980	-.03290	483.20000
.590	28.970	-.00200	.06200	.01540	.07740	-.04220	-.05960	-.04220	-.05780	-.03660	483.20000
GRADIENT	-.00207	-.00271	-.00203	-.00276	-.00276	.00206	-.00010	.00003	-.00003	.00142	.00000

RUN NO. 158/ 0 RM/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CH	CHT	CHD	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.600	-.722	-.00380	.19320	.06870	.28190	-.02730	-.04530	-.02690	-.04260	.01390	640.60000
.602	.412	-.00370	.19130	.06630	.27750	-.02720	-.04510	-.02630	-.04230	.01480	640.60000
.602	1.429	-.00330	.18940	.06390	.27320	-.02740	-.04470	-.02660	-.04220	.01550	640.60000
.602	1.493	-.00340	.18950	.06260	.27220	-.02740	-.04510	-.02670	-.04240	.01530	640.60000
.601	3.882	-.00360	.18820	.06020	.26540	-.02750	-.04460	-.02660	-.04180	.01600	640.60000
.601	5.915	-.00310	.18210	.05710	.25390	-.02760	-.04460	-.02630	-.04220	.01930	640.60000
.798	7.929	-.00250	.17680	.05580	.23560	-.02660	-.04470	-.02670	-.04240	.02010	640.60000
.799	9.935	-.00240	.17530	.05340	.21450	-.02680	-.04470	-.02763	-.04290	.02120	640.60000
.798	12.940	-.00200	.16630	.02660	.19290	-.02680	-.04560	-.02610	-.04320	.02140	640.60000
.800	16.060	-.00320	.14170	.02150	.16320	-.02750	-.04730	-.02670	-.04460	.01130	640.60000
.798	19.120	-.00290	.13290	.02310	.15610	-.02840	-.05080	-.02930	-.04760	.01270	640.60000
.796	22.190	-.00330	.12650	.03310	.15980	-.03150	-.05460	-.03280	-.05100	.01520	640.60000
.797	25.310	-.00390	.12650	.03810	.16460	-.03870	-.06020	-.03860	-.05350	.01550	640.60000
.799	29.250	-.00640	.10760	.03660	.14420	-.04590	-.06490	-.04690	-.05800	.01190	640.60000
GRADIENT	-.00205	-.00207	-.00188	-.00294	-.00294	.00005	.00014	.00002	-.00015	.00157	.00000

ARC 11-747 QAS3A B C H F M V NMM. RN/L

(BEJ005) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEWIN = -10.0000  
 AIRLON = 5.0000 BDFLAP = -11.7000  
 SPDRK = .0000 RUDDER = .0000  
 ELEV-L = -5.0000 ELEV-R = -15.0000

RUN NO. 157/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.975	-7.15	.26320	.38110	-.03680	-.05410	-.03470	-.05120	.02020	616.70000
.973	-7.40	.24830	.35720	-.03420	-.05120	-.03240	-.04760	.02640	616.70000
.972	-7.65	.24020	.35190	-.03420	-.05230	-.03250	-.04850	.02610	616.70000
.974	-7.39	.24540	.34490	-.03410	-.05210	-.03250	-.04860	.02550	616.70000
.973	-7.67	.23450	.31740	-.03250	-.05120	-.03140	-.04750	.02660	616.70000
.971	-7.96	.22440	.28820	-.02950	-.04890	-.02940	-.04610	.02820	616.70000
.979	-7.49	.22180	.26580	-.02770	-.04820	-.02680	-.04530	.02820	616.70000
.972	-7.83	.22040	.24910	-.02800	-.04790	-.02750	-.04590	.02460	616.70000
.972	-8.06	.17520	.20010	-.02730	-.04850	-.02650	-.04700	.01340	616.70000
.979	-7.93	.16000	.18720	-.03030	-.05260	-.02920	-.05040	.01510	616.70000
.970	-8.0710	.11520	.18170	-.03660	-.06150	-.03490	-.05610	.03100	616.70000
.979	-7.95	.14540	.18450	-.04300	-.06340	-.04300	-.05630	.06110	616.70000
.973	-8.230	.11300	.17520	-.04560	-.05970	-.05130	-.04900	.10450	616.70000
.971	-8.630	.10360	.14070	-.06140	-.05460	-.06100	-.04870	.08470	616.70000
GRADIENT	.00000	-.00569	-.01321	.00082	.00047	.00061	.00061	.00010	.00000

RUN NO. 156/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.054	-6.77	.30290	.43250	-.07330	-.07650	-.06960	-.08020	.02210	627.80000
1.058	-7.34	.30680	.41040	-.07430	-.07560	-.06960	-.07960	.02440	627.80000
1.055	-7.59	.30150	.39580	-.07230	-.07440	-.06780	-.07900	.02700	627.80000
1.055	-7.89	.30190	.38570	-.07080	-.07350	-.06750	-.07850	.02680	627.80000
1.054	-8.11	.24490	.35330	-.06280	-.06930	-.06380	-.07630	.03160	627.80000
1.050	-8.77	.28980	.33680	-.06020	-.06540	-.06170	-.07580	.03760	627.80000
1.050	-9.15	.27340	.30850	-.05960	-.06120	-.06100	-.07530	.03320	627.80000
1.052	-9.72	.24950	.28060	-.05210	-.05970	-.06160	-.07470	.07210	627.80000
1.048	-12.750	.20910	.23110	-.04640	-.06010	-.06000	-.07660	.08440	627.80000
1.050	-15.820	.16630	.18140	-.03950	-.04790	-.04540	-.07420	.07810	627.80000
1.048	-18.870	.13920	.14070	-.03350	-.04110	-.03520	-.07330	.08280	627.80000
1.050	-21.920	.09800	.08780	-.02490	-.04050	-.03470	-.07390	.04240	627.80000
1.049	-24.930	.09180	.04960	-.08240	-.05480	-.07330	-.05480	.02280	627.80000
1.052	-29.040	.01280	.01800	-.07990	-.05830	-.08120	-.06980	-.01390	627.80000
GRADIENT	.00192	-.00026	-.01675	.00248	.00163	.00136	.00034	.00187	.00000

DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM. RN/L

(BEJ005) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3510 IN.  
 LREF = 1.2240 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -11.000  
 ALRON = 5.0000 BDFLAP = -11.700  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = -5.0000 ELEV-R = -15.000

RUN NO. 155/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

WICH	ALPHA	CHX	CHET	CHCO	CHCT	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.195	-1.675	.02610	.30160	.07810	.37770	-.05140	-.06270	-.05980	-.06040	.04970	568.40000
1.200	-1.282	.02360	.29470	.06790	.35560	-.04950	-.06190	-.05360	-.07630	.05360	568.40000
1.204	1.274	.01930	.24750	.05000	.33750	-.04630	-.06090	-.05530	-.07220	.06140	568.40000
1.211	1.720	.02050	.24500	.04710	.33210	-.04740	-.06110	-.05580	-.07210	.06290	568.40000
1.211	5.653	.00390	.27470	.03340	.30820	-.04960	-.05640	-.04930	-.06200	.06360	568.40000
1.213	5.622	-.00550	.25750	.02560	.26630	-.04480	-.05730	-.04480	-.05570	.06210	568.40000
1.213	7.691	-.01050	.23310	.02670	.26170	-.04730	-.05690	-.04120	-.05570	.06310	568.40000
1.199	9.630	-.00840	.21370	.02500	.23410	-.04520	-.05560	-.04400	-.05300	.05750	568.40000
1.193	12.670	-.00650	.18720	.03300	.21110	-.04360	-.05370	-.04190	-.05190	.05450	568.40000
1.198	15.720	-.00650	.11910	.04290	.12210	-.04810	-.05240	-.04370	-.05530	.02770	568.40000
1.190	16.770	-.00710	.07620	-.01400	.06780	-.04930	-.05380	-.04460	-.05710	.01650	568.40000
1.194	21.810	-.00340	.04730	-.02160	.02710	-.04550	-.05380	-.04420	-.05330	.01520	568.40000
1.196	24.830	.00230	.00960	-.02130	-.01140	-.04470	-.04730	-.04330	-.05210	-.02290	568.40000
1.197	26.860	.00370	-.00250	-.02600	-.05180	-.06280	-.04490	-.06510	-.04490	-.04340	568.40000
GRADIENT		-.00505	-.00621	-.00359	-.01562	.00042	.00102	.00231	.00417	.00264	

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F M V RN/L = 3.0

(BEJ066) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA = .0000 ELEVON = 7.500  
 AILRON = -7.500 BDFLAP = -11.700  
 SPOBRK = 25.000 RUSSER = .0000  
 ELEV-L = .0000 ELEV-R = 15.000

## PARAMETRIC DATA

RUN NO. 108/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	C-CHI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.600	-1.607	-0.00250	-0.01390	-0.01970	-0.03360	-0.03560	-0.03320	-0.03520	-0.05110	-0.01930	353.50000
.600	.070	-0.00130	-0.01470	-0.02160	-0.03620	-0.03570	-0.05270	-0.03520	-0.05190	-0.01930	353.50000
.599	1.614	-0.00200	-0.01480	-0.02610	-0.04090	-0.03570	-0.05290	-0.03540	-0.05130	-0.01800	353.50000
.597	3.567	-0.00140	-0.01640	-0.03240	-0.04800	-0.03560	-0.05270	-0.03540	-0.05160	-0.01740	353.50000
.599	5.563	-0.00240	-0.02050	-0.03320	-0.05970	-0.03560	-0.05290	-0.03510	-0.05100	-0.01640	353.50000
.599	7.632	-0.00240	-0.03600	-0.04550	-0.08150	-0.03560	-0.05290	-0.03510	-0.05090	-0.01690	353.50000
.599	9.628	-0.00230	-0.04280	-0.04890	-0.09170	-0.03550	-0.05340	-0.03470	-0.05090	-0.01870	353.50000
.598	12.650	-0.00230	-0.05500	-0.05980	-0.11490	-0.03570	-0.05310	-0.03470	-0.05130	-0.02680	353.50000
.599	15.730	-0.00220	-0.06130	-0.07190	-0.15320	-0.03530	-0.05180	-0.03430	-0.05060	-0.04010	353.50000
.599	18.750	-0.00450	-0.0770	-0.08660	-0.19430	-0.03740	-0.05480	-0.03560	-0.05210	-0.05970	353.50000
.598	21.790	-0.00420	-0.09390	-0.09510	-0.19690	-0.03940	-0.05700	-0.03610	-0.05410	-0.06510	353.50000
.598	24.820	-0.00150	-0.11590	-0.06810	-0.18380	-0.04320	-0.05860	-0.04260	-0.05780	-0.06918	353.50000
.601	28.780	-0.00320	-0.09870	-0.05340	-0.15210	-0.05150	-0.06700	-0.05120	-0.07050	-0.06140	353.50000
GRADIENT		.00015	-0.00054	-0.00304	-0.00359	.000001	.000008	-0.00206	-0.00004	.000053	.000000

RUN NO. 107/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	C-CHI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.600	-1.627	-0.00360	-0.02670	-0.02970	-0.05570	-0.02700	-0.04920	-0.02540	-0.04700	-0.02810	446.10000
.607	.085	-0.00430	-0.02700	-0.03020	-0.05730	-0.02680	-0.04950	-0.02540	-0.04660	-0.00750	446.10000
.793	1.621	-0.00410	-0.02620	-0.03340	-0.05940	-0.02650	-0.04900	-0.02560	-0.04590	-0.00970	446.10000
.798	3.575	-0.00440	-0.02760	-0.03850	-0.06620	-0.02560	-0.04890	-0.02420	-0.04600	-0.00690	446.10000
.805	5.554	-0.00490	-0.03140	-0.04140	-0.07180	-0.02660	-0.04830	-0.02480	-0.04530	-0.00520	446.10000
.800	7.620	-0.00540	-0.04520	-0.04840	-0.09360	-0.02650	-0.04950	-0.02470	-0.04580	-0.00460	446.10000
.800	9.608	-0.00480	-0.06480	-0.05630	-0.12110	-0.02600	-0.04810	-0.02430	-0.04500	-0.02260	446.10000
.801	12.660	-0.00530	-0.08200	-0.06540	-0.14730	-0.02600	-0.04870	-0.02440	-0.04500	-0.02810	446.10000
.802	15.710	-0.00570	-0.12030	-0.08210	-0.20250	-0.02790	-0.05190	-0.02620	-0.04800	-0.02030	446.10000
.799	18.770	-0.00620	-0.11370	-0.09740	-0.21120	-0.03010	-0.05380	-0.02630	-0.05140	-0.02280	446.10000
.799	21.850	-0.00630	-0.11110	-0.08520	-0.19630	-0.03360	-0.06050	-0.03240	-0.05550	-0.02170	446.10000
.799	24.930	-0.00750	-0.11200	-0.06110	-0.17310	-0.04060	-0.06530	-0.04160	-0.05680	-0.03100	446.10000
.799	28.950	-0.00730	-0.12940	-0.06580	-0.19520	-0.04060	-0.06970	-0.05240	-0.06380	-0.03740	446.10000
GRADIENT		-0.00013	-0.00015	-0.00227	-0.00243	.000033	.000008	.000027	.000024	.000015	.000000

ARC 11-747 0453A B C M F W V RN/L = 3.0

(BEJ006) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 7.500  
 AIRON = -7.500 BDPLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = 15.000

RUN NO. 106/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.922	-.636	-.00870	-.02290	-.03090	-.05430	-.02750	-.04360	-.00040	488.10000
.927	.069	-.00790	-.02680	-.03110	-.05480	-.02810	-.04390	-.00070	488.10000
.936	1.589	-.00730	-.03400	-.03070	-.05410	-.02750	-.05010	-.00050	488.10000
.934	3.139	-.00630	-.03380	-.02740	-.05310	-.02590	-.04920	-.00140	488.10000
.900	5.540	-.00700	-.04180	-.02720	-.05190	-.02470	-.04740	-.00160	488.10000
.904	7.591	-.00610	-.04820	-.02790	-.05080	-.02540	-.04710	-.00190	488.10000
.904	9.566	-.00540	-.03640	-.02300	-.05090	-.02100	-.04750	-.02360	488.10000
.903	12.610	-.00490	-.03470	-.02520	-.05130	-.02340	-.04820	-.03340	488.10000
.907	15.630	-.00500	-.03460	-.02670	-.05500	-.02650	-.05210	-.05560	488.10000
.899	18.750	-.00560	-.04830	-.03890	-.06370	-.03700	-.06010	-.06740	488.10000
.900	21.820	-.00850	-.02980	-.05200	-.06970	-.05080	-.06240	-.06590	488.10000
.905	24.930	-.01530	-.04310	-.06410	-.06740	-.06250	-.06340	-.04420	488.10000
.899	28.950	-.01150	-.06710	-.08230	-.06250	-.07840	-.05490	-.03940	488.10000
GRADIENT	.00054	-.00003	-.00003	.00064	.00045	.00044	.00000	.00031	.00000

RUN NO. 105/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.055	-.630	-.00810	-.02620	-.08500	-.07280	-.07890	-.07120	-.05330	537.80000
1.054	.128	-.00810	-.02670	-.08400	-.07270	-.07780	-.07070	-.05480	537.80000
1.055	1.823	-.00880	-.02830	-.08200	-.07100	-.07530	-.06830	-.05500	537.80000
1.055	3.982	-.01080	-.03300	-.07790	-.06370	-.07090	-.06600	-.05560	537.80000
1.055	6.190	-.01120	-.03790	-.07330	-.06700	-.06610	-.06290	-.05390	537.80000
1.051	8.389	-.01180	-.05260	-.06430	-.06400	-.05680	-.05390	-.05040	537.80000
1.050	10.580	-.02350	-.05150	-.06410	-.06350	-.04270	-.05530	-.04640	537.80000
1.052	13.880	-.02880	-.02120	-.06200	-.06240	-.04450	-.05110	-.04150	537.80000
1.052	17.240	-.01240	-.02500	-.04640	-.05050	-.03350	-.04600	-.02490	537.80000
1.053	20.510	-.00780	-.02880	-.04060	-.05080	-.03700	-.04650	-.00710	537.80000
1.052	23.640	-.00950	-.02410	-.06420	-.05880	-.03690	-.06260	-.01620	537.80000
1.054	26.680	-.02900	-.03380	-.03760	-.07080	-.06810	-.06560	-.03140	537.80000
1.050	29.210	-.03800	-.04490	-.05230	-.07930	-.06620	-.05750	-.04130	537.80000
GRADIENT	-.00060	-.00164	-.00292	.00152	.00072	.00167	.00114	.00041	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V RN/L = 3.0

(BEJ006) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 7.500  
 ALLCON = -7.500 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = 15.000

RUN NO. 104/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	3
1.203	-630	-04650	-12920	-06700	-13620	-07100	-06710	-06520	-06640	-03070	570.50000
1.202	.197	-04500	-13230	-07060	-20290	-06980	-06650	-06510	-06610	-02940	570.50000
1.206	1.764	-04600	-13830	-07830	-21650	-06780	-06500	-06290	-06400	-02480	570.50000
1.200	3.872	-04510	-14520	-09260	-23580	-06510	-06400	-06160	-06330	-02240	570.50000
1.199	6.051	-04540	-16020	-10140	-26140	-06280	-06410	-05880	-06280	-01800	570.50000
1.198	8.271	-04590	-17570	-10910	-28480	-06130	-06380	-05690	-06230	-01430	570.50000
1.198	10.450	-04620	-18870	-11590	-30460	-06010	-06310	-05570	-06130	-00940	570.50000
1.193	13.750	-04920	-21710	-12920	-34630	-06070	-06300	-05430	-06020	-00140	570.50000
1.197	17.110	-04200	-26680	-13540	-40220	-06320	-06650	-05400	-06170	-001580	570.50000
1.196	20.390	-04090	-28870	-14210	-43080	-06310	-06490	-05740	-06070	-002710	570.50000
1.199	23.620	-04080	-28220	-14510	-42730	-06590	-05970	-05340	-05750	-04640	570.50000
1.195	26.790	-04190	-26840	-13660	-41500	-06740	-05030	-07780	-05950	-06210	570.50000
1.195	29.220	-02680	-26860	-12580	-39440	-07680	-04520	-08430	-06480	-07650	570.50000
	GRADIENT	.04010	-04033	-04052	-04024	.04129	.04070	.04018	.04074	-040191	-0400000

ARC 11-747 0A53A B C M F W V HIGH RN/L

(BEJ007) (12 MAR 74)

## REFERENCE DATA

SRFP = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRFP = 24.1304 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.000  
 AILRON = .0000 BDFLAP = 16.300  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.000

RUN NO. 294 / 0 RN/L = 6.47 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHP	CHET	CHL	CHL	CHL	CHUR	CHLR	CHBF	Q
.598	-.554	-.00500	-.02770	-.02350	-.05120	-.02360	-.02230	-.04200	-.12430	762.910000
.597	-.072	-.00460	-.02830	-.02500	-.05340	-.02350	-.02260	-.04200	-.12420	762.910000
.599	1.091	-.00530	-.02870	-.02790	-.05660	-.02350	-.02200	-.04160	-.12420	762.910000
.597	1.600	-.00550	-.02930	-.02850	-.05870	-.02360	-.02200	-.04170	-.12520	762.910000
.597	3.548	-.00490	-.03290	-.03520	-.06910	-.02350	-.02200	-.04160	-.12570	762.910000
.598	7.627	-.00580	-.04630	-.04700	-.09330	-.02400	-.02200	-.04170	-.13000	762.910000
.597	9.599	-.00500	-.05520	-.05180	-.10360	-.02360	-.02260	-.04160	-.13400	762.910000
.598	12.630	-.00410	-.06800	-.05560	-.12360	-.02390	-.02200	-.04250	-.13330	762.910000
.598	15.670	-.00560	-.09850	-.06980	-.16820	-.02490	-.02230	-.04260	-.15150	762.910000
.596	18.710	-.00540	-.12560	-.08170	-.20730	-.02530	-.02250	-.04400	-.15770	762.910000
.597	21.750	-.00580	-.14940	-.09490	-.24630	-.02830	-.02610	-.04680	-.17790	762.910000
.596	24.710	-.00590	-.17940	-.07940	-.28380	-.03400	-.03190	-.05260	-.13650	762.910000
.598	28.680	-.00620	-.11960	-.05660	-.17610	-.04610	-.04470	-.05520	-.22500	762.910000
GRADIENT		-.00004	-.00124	-.00268	-.00411	-.02221	-.00007	-.00001	-.00039	11.0000

RUN NO. 293 / 0 RN/L = 5.52 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHP	CHET	CHL	CHL	CHL	CHUR	CHLR	CHBF	Q
.800	-.580	-.00500	-.03630	-.02770	-.06410	-.02510	-.02370	-.04650	-.13650	840.910000
.800	.062	-.00490	-.03680	-.02970	-.06650	-.02510	-.02370	-.04640	-.13750	840.910000
.799	1.104	-.00520	-.03780	-.03440	-.07180	-.02530	-.02370	-.04620	-.13830	840.910000
.800	1.602	-.00480	-.03820	-.03590	-.07320	-.02500	-.02240	-.04610	-.13960	840.910000
.798	3.564	-.00540	-.04140	-.04190	-.08140	-.02510	-.02340	-.04560	-.14030	840.910000
.800	7.611	-.00460	-.05860	-.04640	-.10720	-.02510	-.02260	-.04630	-.14760	840.910000
.800	9.576	-.00470	-.07480	-.05710	-.13190	-.02570	-.02250	-.04650	-.14350	840.910000
.798	12.590	-.00570	-.10000	-.06880	-.16680	-.02670	-.02240	-.04790	-.15580	840.910000
.798	15.660	-.00550	-.13560	-.08120	-.21670	-.02760	-.02230	-.04900	-.17150	840.910000
.799	18.710	-.00630	-.14470	-.09390	-.24400	-.03090	-.02230	-.05130	-.14600	840.910000
.799	21.760	-.00890	-.13800	-.09090	-.23620	-.03710	-.02350	-.05800	-.20900	840.910000
.796	24.690	-.01650	-.14150	-.06890	-.20990	-.04720	-.02460	-.06640	-.25210	840.910000
.802	28.710	-.01380	-.15230	-.06930	-.22160	-.05480	-.02570	-.06300	-.25710	840.910000
GRADIENT		-.00010	-.00099	-.00322	-.00420	-.00001	-.00000	-.00022	-.00072	11.0000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 281

ARC 11-747 0453A B C H F W V HIGH RN/L

(BEJ007) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .0000 ELEVON = 15.000  
 ALLRON = .0000 BOFLAP = 16.300  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

## PARAMETRIC DATA

RUN NO. 292/ 0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.920	-614	-00760	-03310	-02510	-05820	-03740	-03870	-03420	-03440	-15370	786.30000
.903	.080	-00690	-03330	-02750	-06080	-03730	-05860	-03420	-03480	-15450	786.30000
.899	1.091	-00740	-03440	-03090	-06330	-03640	-05850	-03310	-03440	-15460	786.30000
.897	1.641	-00750	-03530	-03220	-06740	-03550	-05890	-03240	-03360	-15490	786.30000
.901	3.549	-00750	-04390	-03830	-08220	-03490	-05770	-03150	-03360	-15910	786.30000
.899	7.570	-00710	-07000	-06280	-13280	-03430	-05560	-03180	-05100	-16740	786.30000
.899	9.573	-00720	-06990	-07090	-16070	-03590	-05670	-03340	-05240	-17240	786.30000
.901	12.590	-00650	-14120	-08250	-22320	-03580	-05860	-03340	-05460	-17910	786.30000
.899	15.680	-00640	-19420	-09770	-28790	-04020	-06340	-03370	-05930	-20010	786.30000
.901	18.750	-00880	-18890	-11020	-29920	-05090	-07180	-04770	-06610	-22550	786.30000
.903	21.770	-00990	-16720	-10910	-27630	-06450	-07790	-06140	-07100	25900	786.30000
.897	24.730	-01880	-16790	-08210	-24990	-07590	-07370	-07260	-05820	-30490	786.30000
.902	28.720	-02330	-13130	-08650	-27780	-08560	-06640	-08020	-06840	-31140	786.30000
GRADIENT		-102005	-00260	-00315	-00574	00066	00026	00071	00027	-00123	000000

RUN NO. 291/ 0 RN/L = 4.53 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHEF	Q
1.051	-646	-00830	-10560	-06210	-16770	-07850	-07930	-07230	-07710	-24740	819.40000
1.054	.075	-00770	-10660	-06350	-17010	-07740	-07830	-07170	-07630	-25040	819.40000
1.052	1.111	-00800	-10840	-06640	-17430	-07610	-07670	-07020	-07450	-25040	819.40000
1.052	1.577	-00860	-11110	-06760	-17880	-07540	-07580	-06990	-07360	-25010	819.40000
1.052	3.543	-00950	-11670	-07560	-19230	-07200	-07450	-06590	-07120	-25790	819.40000
1.051	7.592	-01140	-13610	-09370	-22680	-06170	-06700	-05470	-06260	-27840	819.40000
1.048	9.592	-01270	-14990	-10410	-23410	-05590	-06200	-04840	-05670	-29110	819.40000
1.050	12.600	-00810	-13790	-11810	-30600	-04870	-05480	-04430	-05110	-30690	819.40000
1.051	15.710	-00770	-23940	-12520	-36570	-05380	-05600	-04960	-05250	-33070	819.40000
1.050	18.710	-00780	-26700	-13430	-40130	-05940	-05800	-05540	-05420	-34270	819.40000
1.051	21.750	-00980	-27850	-13840	-41690	-06460	-05620	-05860	-05240	-36690	819.40000
1.049	24.770	-00830	-25610	-13630	-39250	-07830	-05660	-07640	-07620	-38360	819.40000
1.051	28.690	-02240	-26080	-11740	-37810	-10760	-08160	-09550	-07140	-41120	819.40000
GRADIENT		-000036	-00273	-00325	-00598	000154	00017	000158	00145	-00226	000000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 282

ARC 11-747 QAS3A B C M F W V HIGH RN/L

(00J007) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 53.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .00000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .00000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.0000  
 AILSON = .0000 BDFLAP = 16.3000  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEVLR = 15.0000 ELEVPR = 15.0000

RUN NO. 230/0 RN/L = 4.29 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHUF	CHLR	CHFR	
1.17	-1.662	-1.00500	-1.12390	-1.06450	-1.13440	-1.07610	-1.05560	-1.07170	-1.06500	-1.26420	823.000000
1.200	-1.41	-1.00520	-1.12440	-1.06720	-1.19560	-1.07540	-1.06420	-1.07130	-1.06110	-1.26300	823.000000
1.200	1.110	-1.00510	-1.13350	-1.07200	-2.16300	-1.07430	-1.06270	-1.07150	-1.06140	-1.27230	823.000000
1.204	1.613	-1.00470	-1.13520	-1.07420	-2.25990	-1.07420	-1.06170	-1.07120	-1.06100	-1.27540	823.000000
1.204	3.531	-1.00390	-1.14250	-1.08470	-2.2710	-1.07220	-1.06020	-1.06870	-1.05370	-1.26800	823.000000
1.198	7.552	-1.00320	-1.16740	-1.10110	-2.2650	-1.07000	-1.06000	-1.06600	-1.05930	-1.31300	823.000000
1.201	9.591	-1.00440	-1.18200	-1.07760	-2.29400	-1.06930	-1.06020	-1.06800	-1.05910	-1.32470	823.000000
1.202	12.580	-1.00470	-1.20410	-1.12010	-3.2420	-1.06890	-1.06070	-1.06700	-1.05910	-1.34210	823.000000
1.201	15.670	-1.00500	-1.24260	-1.12330	-3.6610	-1.07090	-1.06350	-1.06790	-1.06160	-1.35460	823.000000
1.201	18.740	-1.00750	-1.27120	-1.13300	-4.0420	-1.07430	-1.06410	-1.07010	-1.06470	-1.37510	823.000000
1.200	21.690	-1.00120	-1.27190	-1.13980	-4.1170	-1.07180	-1.06080	-1.07090	-1.06130	-1.39410	823.000000
1.200	24.700	-1.00130	-1.28280	-1.14240	-4.2520	-1.07410	-1.06070	-1.07430	-1.06310	-1.41590	823.000000
1.197	28.650	-1.00240	-1.26720	-1.13450	-4.2170	-1.07970	-1.05420	-1.07720	-1.05710	-1.42570	823.000000
GRADIENT	1.00029	-1.00331	-1.00814	-1.00466	-1.00091	-1.00126	-1.00072	-1.00121	-1.00614	-1.00000	

## REFERENCE DATA

SREF = 2.4210 SQ.FT.      YMRP = 32.3010 IN.  
 REF = 14.2440 IN.      YMRP = .0000 IN.  
 BREF = 26.1364 IN.      ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA =  
ALRON =  
SFCBRK =  
ELEV-L =  
/ 5.00

## PARAMETRIC DATA

RUN NO. 295/5    RN/L = 3.97    GRADIENT INTERVAL = -5.00/ 5.00

PARAMETER	ALPHA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHRF	B
CHMCH	-.598	-.00340	-.003260	-.02450	-.05710	-.02420	-.04470	-.02120	-.02530	476.300000
.598	-.583	-.00510	-.003260	-.02620	-.05680	-.02390	-.04430	-.02121	-.04190	476.300000
.598	-.580	-.00510	-.003260	-.02620	-.05680	-.02390	-.04430	-.02121	-.04190	476.300000
.597	1.100	-.00460	-.003380	-.02930	-.06310	-.02340	-.04400	-.02110	-.04170	476.300000
.597	1.602	-.00520	-.03450	-.03140	-.06590	-.02360	-.04420	-.02100	-.04170	476.300000
.597	3.540	-.00530	-.03400	-.03730	-.07590	-.02420	-.04410	-.02120	-.04160	476.300000
.598	7.619	-.00540	-.03400	-.04300	-.10310	-.02400	-.04460	-.02130	-.04220	476.300000
.598	9.580	-.00540	-.05750	-.05360	-.11110	-.02400	-.04470	-.02100	-.04220	476.300000
.598	12.630	-.00460	-.07600	-.06670	-.13670	-.02400	-.04510	-.02150	-.04290	476.300000
.599	15.690	-.00510	-.11610	-.07300	-.17910	-.02490	-.04550	-.02220	-.04310	476.300000
.598	19.540	-.00540	-.13100	-.07410	-.21810	-.02600	-.04620	-.02360	-.04320	476.300000
.598	21.730	-.00510	-.12810	-.09970	-.22780	-.02860	-.04990	-.02360	-.04760	476.300000
.598	24.720	-.00380	-.14450	-.07470	-.20930	-.02860	-.05450	-.03160	-.05300	476.300000
.598	28.660	-.00390	-.12630	-.05450	-.18430	-.04690	-.06810	-.04310	-.06800	476.300000
GRADIENT		-.001005	-.00136	-.00329	-.02466	-.000001	-.00012	-.00001	-.000163	476.300000

RUN NO. 236 / 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHR	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15	CH16	CH17	CH18	CH19	CH20	CH21	CH22	CH23	CH24	CH25	CH26	CH27	CH28	CH29	CH30	CH31	CH32	CH33	CH34	CH35	CH36	CH37	CH38	CH39	CH40	CH41	CH42	CH43	CH44	CH45	CH46	CH47	CH48	CH49	CH50	CH51	CH52	CH53	CH54	CH55	CH56	CH57	CH58	CH59	CH60	CH61	CH62	CH63	CH64	CH65	CH66	CH67	CH68	CH69	CH70	CH71	CH72	CH73	CH74	CH75	CH76	CH77	CH78	CH79	CH80	CH81	CH82	CH83	CH84	CH85	CH86	CH87	CH88	CH89	CH90	CH91	CH92	CH93	CH94	CH95	CH96	CH97	CH98	CH99	CH100	CH101	CH102	CH103	CH104	CH105	CH106	CH107	CH108	CH109	CH110	CH111	CH112	CH113	CH114	CH115	CH116	CH117	CH118	CH119	CH120	CH121	CH122	CH123	CH124	CH125	CH126	CH127	CH128	CH129	CH130	CH131	CH132	CH133	CH134	CH135	CH136	CH137	CH138	CH139	CH140	CH141	CH142	CH143	CH144	CH145	CH146	CH147	CH148	CH149	CH150	CH151	CH152	CH153	CH154	CH155	CH156	CH157	CH158	CH159	CH160	CH161	CH162	CH163	CH164	CH165	CH166	CH167	CH168	CH169	CH170	CH171	CH172	CH173	CH174	CH175	CH176	CH177	CH178	CH179	CH180	CH181	CH182	CH183	CH184	CH185	CH186	CH187	CH188	CH189	CH190	CH191	CH192	CH193	CH194	CH195	CH196	CH197	CH198	CH199	CH200	CH201	CH202	CH203	CH204	CH205	CH206	CH207	CH208	CH209	CH210	CH211	CH212	CH213	CH214	CH215	CH216	CH217	CH218	CH219	CH220	CH221	CH222	CH223	CH224	CH225	CH226	CH227	CH228	CH229	CH230	CH231	CH232	CH233	CH234	CH235	CH236	CH237	CH238	CH239	CH240	CH241	CH242	CH243	CH244	CH245	CH246	CH247	CH248	CH249	CH250	CH251	CH252	CH253	CH254	CH255	CH256	CH257	CH258	CH259	CH260	CH261	CH262	CH263	CH264	CH265	CH266	CH267	CH268	CH269	CH270	CH271	CH272	CH273	CH274	CH275	CH276	CH277	CH278	CH279	CH280	CH281	CH282	CH283	CH284	CH285	CH286	CH287	CH288	CH289	CH290	CH291	CH292	CH293	CH294	CH295	CH296	CH297	CH298	CH299	CH300	CH301	CH302	CH303	CH304	CH305	CH306	CH307	CH308	CH309	CH310	CH311	CH312	CH313	CH314	CH315	CH316	CH317	CH318	CH319	CH320	CH321	CH322	CH323	CH324	CH325	CH326	CH327	CH328	CH329	CH330	CH331	CH332	CH333	CH334	CH335	CH336	CH337	CH338	CH339	CH340	CH341	CH342	CH343	CH344	CH345	CH346	CH347	CH348	CH349	CH350	CH351	CH352	CH353	CH354	CH355	CH356	CH357	CH358	CH359	CH360	CH361	CH362	CH363	CH364	CH365	CH366	CH367	CH368	CH369	CH370	CH371	CH372	CH373	CH374	CH375	CH376	CH377	CH378	CH379	CH380	CH381	CH382	CH383	CH384	CH385	CH386	CH387	CH388	CH389	CH390	CH391	CH392	CH393	CH394	CH395	CH396	CH397	CH398	CH399	CH400	CH401	CH402	CH403	CH404	CH405	CH406	CH407	CH408	CH409	CH410	CH411	CH412	CH413	CH414	CH415	CH416	CH417	CH418	CH419	CH420	CH421	CH422	CH423	CH424	CH425	CH426	CH427	CH428	CH429	CH430	CH431	CH432	CH433	CH434	CH435	CH436	CH437	CH438	CH439	CH440	CH441	CH442	CH443	CH444	CH445	CH446	CH447	CH448	CH449	CH450	CH451	CH452	CH453	CH454	CH455	CH456	CH457	CH458	CH459	CH460	CH461	CH462	CH463	CH46
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TABULATED SOURCE DATA - QAS3A

DATE 06 JUL 74

(BEJ008) (12 MAR 74)

ARC 11-747 QAS3A B C M F W V NOM. RN/L

PARAMETRIC DATA

BETA = .000 ELEWN = 15.000  
 AILRON = .000 BDFLAP = 16.300  
 SFD8RK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 299/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.198	-678	.00980	-12840	-07740	-06150	-08740	-06760	-25630	573.20000
1.201	.061	.00850	-13100	-07700	-06150	-08740	-06670	-26000	573.20000
1.201	1.080	.00700	-13440	-07580	-06060	-07820	-06520	-26590	573.20000
1.203	1.594	.00710	-13580	-07510	-06040	-07770	-06480	-26910	573.20000
1.199	3.546	.00380	-14030	-07390	-05920	-07460	-06230	-28240	573.20000
1.198	7.574	.00070	-16210	-07060	-05840	-07020	-05950	-30670	573.20000
1.190	9.565	-00190	-17870	-07010	-05950	-06880	-05890	-31820	573.20000
1.200	12.600	-00330	-19420	-07040	-06000	-06770	-05940	-33560	573.20000
1.199	15.660	-00650	-23280	-07220	-06120	-06770	-05950	-35650	573.20000
1.198	18.700	-01110	-27070	-07300	-06720	-07030	-06320	-36940	573.20000
1.199	21.740	-01500	-28510	-07810	-06610	-06890	-06030	-38920	573.20000
1.198	24.680	-01720	-29640	-08350	-06550	-07090	-06080	-41280	573.20000
1.194	28.660	-00840	-29000	-08900	-05250	-07810	-05490	-45620	573.20000
GRADIENT		-00123	-00281	-00227	-00058	-00146	-00125	-00622	.000000

DATE 16 JUL 74

## TABULATED SOURCE DATA - QM53A

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ARC 11-747 QM53A B C M F W V LOW RN/L

(BEJ009) (12 MAR 74)

## REFERENCE DATA

S-EFF = 2.4210 SQ.FT. WMRP = 32.3010 IN.  
 C-EFF = 14.2440 IN. YMRP = 10.0000 IN.  
 B-EFF = 26.1004 IN. ZMRP = 1.2500 IN.  
 SCALE = .0330 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = 15.0000  
 ALLRON = .0000 BDFLAP = 16.3000  
 SDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 3047 0 RN/L = 1.73 GRADIENT INTERVAL = -5.000/ 5.000

MACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	3
.536	-6.64	.00010	-.03290	-.02640	-.05940	-.02330	-.04490	-.02620	-.04410	-.12230	2.8.1.0000
.62	.080	.00120	-.03250	-.02800	-.06050	-.02480	-.04490	-.02600	-.04400	-.12220	2.8.1.0000
.536	1.095	.00270	-.03330	-.03120	-.06350	-.02450	-.04420	-.02580	-.04360	-.12220	2.8.1.0000
.546	1.602	.00510	-.03410	-.03250	-.06660	-.02530	-.04510	-.02640	-.04390	-.12310	2.8.1.0000
.600	3.550	.00930	-.03810	-.03550	-.07760	-.02470	-.04440	-.02580	-.04360	-.12310	2.8.1.0000
.62	7.505	.02030	-.05320	-.05070	-.10390	-.02480	-.04550	-.02560	-.04450	-.12360	2.8.1.0000
.536	3.579	.00950	-.06270	-.05260	-.11550	-.02520	-.04510	-.02590	-.04460	-.12360	2.8.1.0000
.557	12.610	.00920	-.06040	-.05660	-.14630	-.02470	-.04580	-.02620	-.04460	-.12360	2.8.1.0000
.599	15.670	.00860	-.11080	-.07520	-.18630	-.02670	-.04610	-.02590	-.04460	-.12360	2.8.1.0000
.597	18.700	.00840	-.13630	-.09420	-.23020	-.02690	-.04630	-.02770	-.04460	-.12360	2.8.1.0000
.62	21.700	.00800	-.12920	-.10150	-.23330	-.02890	-.05030	-.02980	-.04930	-.17250	2.8.1.0000
.536	24.660	.00810	-.14810	-.08120	-.22330	-.03540	-.05560	-.03590	-.05520	-.20040	2.8.1.0000
.600	26.510	.00810	-.13740	-.06190	-.19330	-.04630	-.06730	-.04610	-.06590	-.22530	2.8.1.0000
GRADIENT			-.0132	-.00318	-.00449	.00009	.00111	.00006	.00120	-.00116	.00000

RUN NO. 3037 0 RN/L = 2.10 GRADIENT INTERVAL = -5.000/ 5.000

MACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	3
.798	-6.60	.00000	-.03380	-.03160	-.07140	-.02500	-.04760	-.02530	-.04750	-.13730	310.7.0000
.798	.074	.00150	-.03560	-.03310	-.07270	-.02520	-.04820	-.02560	-.04840	-.13810	310.7.0000
.796	1.089	.00210	-.04010	-.03520	-.07530	-.02560	-.04820	-.02570	-.04800	-.13750	310.7.0000
.797	1.592	.00220	-.04150	-.03760	-.07910	-.02520	-.04830	-.02520	-.04820	-.13960	310.7.0000
.802	3.545	.00200	-.04480	-.04240	-.08720	-.02530	-.04750	-.02510	-.04770	-.14160	310.7.0000
.798	7.509	.00250	-.06560	-.05230	-.11790	-.02500	-.04730	-.02510	-.04770	-.14610	310.7.0000
.799	9.575	.00230	-.09200	-.06080	-.15280	-.02570	-.04800	-.02540	-.04800	-.15020	310.7.0000
.805	12.600	.00200	-.11410	-.07150	-.18560	-.02650	-.04930	-.02660	-.04920	-.15380	310.7.0000
.801	15.650	.00200	-.15140	-.08900	-.24030	-.02810	-.05210	-.02800	-.05180	-.17420	310.7.0000
.801	18.690	.00200	-.15160	-.10300	-.25470	-.03020	-.05560	-.03000	-.05500	-.18650	310.7.0000
.800	21.670	.00200	-.14570	-.10530	-.25100	-.03740	-.06210	-.03740	-.06210	-.21200	310.7.0000
.800	24.670	.00400	-.14990	-.06940	-.21930	-.04800	-.06950	-.04790	-.06560	-.25710	310.7.0000
.800	28.610	.00370	-.15910	-.07140	-.22350	-.05450	-.06790	-.05350	-.06320	-.26110	310.7.0000
GRADIENT			-.00128	-.00264	-.00392	-.00006	.00006	.00019	.00002	-.00001	.00000

## REFERENCE DATA

```
SEF = 2.4210 SQ.FT
LEF = 14.244 IN.
BEF = 24.104 IN.
SCALE = 1/8" = 1.000 SCALE
```

### PARAMETRIC DATA

BETA =	.0000	ELEV-W =	15.0000
ALRON =	.0000	BDFAP =	16.3000
SPBRK =	25.0000	RUDDER =	.0000
ELEV-L =	15.0000	ELEV-R =	15.0000

RUN NO. 302/0 RN/L = 2.21 GRADIENT INTERVAL = -5.01 / 5.01

MACH	ALPHA	CHR	CHET	CHED	CHET	CHLL	CHUR	CHLR	CHCF	Q
.904	-.626	-.00130	-.03860	-.03050	-.06920	-.03780	-.03580	-.05760	-.15440	358.500000
.903	-.046	-.00230	-.03870	-.03180	-.07050	-.03760	-.03520	-.05690	-.15610	358.500000
.901	1.071	-.00270	-.04070	-.03410	-.07480	-.03570	-.03430	-.05500	-.15500	358.500000
.901	1.590	-.00190	-.04250	-.03580	-.07820	-.03510	-.03370	-.05520	-.15750	358.500000
.896	3.527	-.00240	-.05180	-.04180	-.09360	-.03280	-.03540	-.05390	-.16070	358.500000
.894	7.579	-.00140	-.08280	-.06490	-.14780	-.03340	-.03370	-.05330	-.16890	358.500000
.897	9.555	-.00050	-.11580	-.07310	-.18890	-.03410	-.03420	-.05420	-.17130	358.500000
.898	12.570	-.00060	-.15230	-.08600	-.21830	-.03600	-.03500	-.05730	-.18450	358.500000
.901	15.660	-.00020	-.19330	-.09920	-.23250	-.03960	-.03360	-.06670	-.20160	358.500000
.900	18.660	-.00040	-.1360	-.11140	-.30500	-.04890	-.06920	-.06690	-.22030	358.500000
.901	21.680	-.00210	-.17300	-.11930	-.26630	-.05940	-.07340	-.07300	-.25570	358.500000
.901	24.660	-.00250	-.18210	-.08750	-.26970	-.07620	-.07750	-.05430	-.31560	358.500000
.901	28.610	-.01830	-.19890	-.08930	-.28820	-.06360	-.08170	-.04820	-.31580	358.500000
GRACIENT		-.00027	-.00327	-.00275	-.00599	-.00127	-.00037	-.00014	-.00044	-.00000

RUN NO. 301 / 0 RN/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

[illegible]

DATE 06 JUL 74

## TABULATED SOURCE DATA - QMS3A

PAGE 2cc

ARC 11-747 QMS3A B C M F W V LOW RN/L

(BEJ009) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 ALLRON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 300/0 RN/L = 2.34 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CME	CMEI	CMEC	CMET	CHUL	CHLL	CHUR	CHLR	CHRF	3
1.212	-1.659	-1.00720	-1.13180	-1.06710	-1.20110	-1.07720	-1.06510	-1.07190	-1.06320	-1.25790	442.50000
1.199	-1.650	-1.00560	-1.13470	-1.06890	-1.20370	-1.07640	-1.06380	-1.07190	-1.06270	-1.26240	442.50000
1.197	-1.64	-1.00750	-1.13720	-1.07350	-1.21070	-1.07530	-1.06300	-1.06990	-1.06190	-1.26930	442.50000
1.197	-1.565	-1.00660	-1.13630	-1.07630	-1.21460	-1.07460	-1.06200	-1.0696	-1.06140	-1.27370	442.50000
1.199	-1.528	-1.00490	-1.14000	-1.08750	-1.23150	-1.07160	-1.06100	-1.06790	-1.05930	-1.28790	442.50000
1.192	-1.557	-1.00550	-1.17230	-1.10360	-1.27590	-1.06860	-1.06020	-1.06460	-1.05870	-1.31340	442.50000
1.191	-1.546	-1.00570	-1.16210	-1.11160	-1.29680	-1.06810	-1.06030	-1.06410	-1.05860	-1.32630	442.50000
1.193	-1.570	-1.00580	-1.20430	-1.11920	-1.32720	-1.06810	-1.06110	-1.06390	-1.05860	-1.34770	442.50000
1.191	-1.630	-1.00760	-1.24950	-1.12560	-1.37500	-1.07130	-1.06310	-1.06610	-1.05840	-1.36120	442.50000
1.189	-1.640	-1.00720	-1.26070	-1.13370	-1.41440	-1.07440	-1.06690	-1.06970	-1.06470	-1.37660	442.50000
1.195	-1.680	-1.00290	-1.29150	-1.14160	-1.43210	-1.07350	-1.06210	-1.07190	-1.06180	-1.39310	442.50000
1.194	-1.650	-1.00500	-1.29590	-1.14490	-1.44880	-1.07750	-1.05990	-1.07270	-1.05960	-1.41510	442.50000
1.188	-1.610	-1.00320	-1.29560	-1.13960	-1.43520	-1.08010	-1.05150	-1.08030	-1.05450	-1.42420	442.50000
		-1.00340	-1.00248	-1.00494	-1.00742	-1.00134	-1.00117	-1.00193	-1.00107	-1.00720	-1.00000

GRADIENT



ARC 11-747 0453A B C M F W V NDM. RN/L

DEPT(10) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. DMGP = 32.3010 IN.  
 LREF = 14.2440 IN. TMGP = .00000 IN.  
 BREF = 26.1304 IN. ZMGP = 11.2500 IN.  
 SCALE = .00000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVW = .0000  
 AILRON = .0000 BOFLAP = 16.3000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 3097 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CMR	CMET	CMED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.596	-.646	-.00340	.04660	.02190	.06850	-.02190	-.04300	-.02090	-.04060	-.11300	480.80000
.599	-.678	-.00290	.04630	.02190	.06880	-.02190	-.04310	-.02130	-.04080	-.11280	480.80000
.599	1.123	-.00270	.04680	.02140	.06820	-.02170	-.04290	-.02120	-.04070	-.11320	480.80000
.598	1.600	-.00210	.04680	.02140	.06820	-.02180	-.04250	-.02100	-.04120	-.11340	480.80000
.596	3.563	-.00240	.04640	.01940	.06580	-.02220	-.04270	-.02140	-.04100	-.11370	480.80000
.597	7.594	-.00310	.04870	.02110	.06310	-.02190	-.04470	-.02140	-.04150	-.11340	480.80000
.599	9.576	-.00460	.05510	.00520	.04030	-.02250	-.04470	-.02100	-.04160	-.12230	480.80000
.598	12.580	-.00250	.02200	-.00520	.01680	-.02230	-.04410	-.02260	-.04190	-.12630	480.80000
.590	15.660	-.00390	.00770	-.01900	-.01130	-.02370	-.04530	-.02360	-.04250	-.13680	480.80000
.598	18.700	-.00290	-.02120	-.03370	-.05490	-.02440	-.04540	-.02360	-.04340	-.15670	480.80000
.597	21.710	-.00320	-.02250	-.04630	-.06870	-.02660	-.04840	-.02550	-.04630	-.17500	480.80000
.597	24.680	-.00260	-.04660	-.04290	-.08960	-.03370	-.05290	-.02960	-.05120	-.19130	480.80000
.597	26.620	-.00180	-.04680	-.02550	-.07230	-.04220	-.06100	-.04340	-.06100	-.22150	480.80000
GRADIENT		.00024	-.00007	-.00060	-.00067	-.00007	.00010	-.00008	-.00010	-.00067	.00000

RUN NO. 3087 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CMR	CMET	CMED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.799	-.664	-.00200	.04960	.02370	.07330	-.02230	-.04750	-.02190	-.04600	-.12870	639.20000
.799	.069	-.00230	.05020	.02410	.07430	-.02290	-.04690	-.02180	-.04570	-.12950	639.20000
.800	1.091	-.00250	.05100	.02440	.07540	-.02230	-.04770	-.02180	-.04570	-.12980	639.20000
.800	1.598	-.00190	.05140	.02460	.07620	-.02250	-.04670	-.02220	-.04510	-.13070	639.20000
.802	3.534	-.00240	.05260	.02420	.07680	-.02220	-.04670	-.02150	-.04510	-.13140	639.20000
.798	7.575	-.00220	.04760	.01310	.06080	-.02240	-.04740	-.02180	-.04580	-.13720	639.20000
.799	9.568	-.00230	.03980	-.00150	.03830	-.02310	-.04830	-.02250	-.04650	-.14080	639.20000
.799	12.590	-.00350	.02500	-.00850	.01650	-.02420	-.04950	-.02340	-.04690	-.14490	639.20000
.797	15.650	-.00330	-.00620	-.02100	-.02720	-.02550	-.05150	-.02500	-.04880	-.16390	639.20000
.798	18.710	-.00310	-.01610	-.04140	-.05650	-.02810	-.05450	-.02750	-.05200	-.18050	639.20000
.796	21.700	-.00400	-.03580	-.04480	-.08060	-.03210	-.05860	-.03210	-.05460	-.20090	639.20000
.800	24.680	-.00460	-.05580	-.03190	-.08670	-.04340	-.06510	-.04030	-.05660	-.23400	639.20000
.796	26.620	-.01110	-.06170	-.02680	-.08850	-.04840	-.06750	-.04840	-.05640	-.25460	639.20000
GRADIENT		-.00026	.000071	.00011	.00003	.00008	.00016	.00007	.00022	-.00063	.00000

TABULATED SOURCE DATA - 0453A

DATE 16 JUL 74

REQ 11-747 0453A B C M F W V NML RN/L

(BE 1.1) 112 MAR 74

REFERENCE DATA

SREF = 2.4210 SQ.FT. TMRP = 32.3310 IN.  
CREF = 14.2440 IN. TMRP = 100.00 IN.  
BREF = 24.1114 IN. TMRP = 11.2510 IN.  
SCALE = 1.300 SCALE

PARAMETRIC DATA

BETA = 1.000  
ALPHON = 16.1  
SREFK = 25.000  
ELEV-L = 1.000  
ELEV-H = 1.000

RUN NO. 307/0 RN/L = 3.70 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CHP	CHET	CHD	CHL	CHU	CHV	CHW	CHF
1.034	-1.667	-1.0420	-1.4650	-1.2750	-1.3360	-1.5230	-1.246	-1.5770	-1.1670
1.035	-1.669	-1.0440	-1.4670	-1.2770	-1.3380	-1.5250	-1.247	-1.5790	-1.1690
1.036	-1.671	-1.0460	-1.4690	-1.2790	-1.3400	-1.5270	-1.248	-1.5810	-1.1710
1.037	-1.673	-1.0480	-1.4710	-1.2810	-1.3420	-1.5290	-1.249	-1.5830	-1.1730
1.038	-1.675	-1.0500	-1.4730	-1.2830	-1.3440	-1.5310	-1.250	-1.5850	-1.1750
1.039	-1.677	-1.0520	-1.4750	-1.2850	-1.3460	-1.5330	-1.251	-1.5870	-1.1770
1.040	-1.679	-1.0540	-1.4770	-1.2870	-1.3480	-1.5350	-1.252	-1.5890	-1.1790
1.041	-1.681	-1.0560	-1.4790	-1.2890	-1.3500	-1.5370	-1.253	-1.5910	-1.1810
1.042	-1.683	-1.0580	-1.4810	-1.2910	-1.3520	-1.5390	-1.254	-1.5930	-1.1830
1.043	-1.685	-1.0600	-1.4830	-1.2930	-1.3540	-1.5410	-1.255	-1.5950	-1.1850
1.044	-1.687	-1.0620	-1.4850	-1.2950	-1.3560	-1.5430	-1.256	-1.5970	-1.1870
1.045	-1.689	-1.0640	-1.4870	-1.2970	-1.3580	-1.5450	-1.257	-1.5990	-1.1890
1.046	-1.691	-1.0660	-1.4890	-1.2990	-1.3600	-1.5470	-1.258	-1.6010	-1.1910
1.047	-1.693	-1.0680	-1.4910	-1.3010	-1.3620	-1.5490	-1.259	-1.6030	-1.1930
1.048	-1.695	-1.0700	-1.4930	-1.3030	-1.3640	-1.5510	-1.260	-1.6050	-1.1950
1.049	-1.697	-1.0720	-1.4950	-1.3050	-1.3660	-1.5530	-1.261	-1.6070	-1.1970
1.050	-1.699	-1.0740	-1.4970	-1.3070	-1.3680	-1.5550	-1.262	-1.6090	-1.1990
1.051	-1.701	-1.0760	-1.4990	-1.3090	-1.3700	-1.5570	-1.263	-1.6110	-1.2010
1.052	-1.703	-1.0780	-1.5010	-1.3110	-1.3720	-1.5590	-1.264	-1.6130	-1.2030
1.053	-1.705	-1.0800	-1.5030	-1.3130	-1.3740	-1.5610	-1.265	-1.6150	-1.2050
1.054	-1.707	-1.0820	-1.5050	-1.3150	-1.3760	-1.5630	-1.266	-1.6170	-1.2070
1.055	-1.709	-1.0840	-1.5070	-1.3170	-1.3780	-1.5650	-1.267	-1.6190	-1.2090
1.056	-1.711	-1.0860	-1.5090	-1.3190	-1.3800	-1.5670	-1.268	-1.6210	-1.2110
1.057	-1.713	-1.0880	-1.5110	-1.3210	-1.3820	-1.5690	-1.269	-1.6230	-1.2130
1.058	-1.715	-1.0900	-1.5130	-1.3230	-1.3840	-1.5710	-1.270	-1.6250	-1.2150
1.059	-1.717	-1.0920	-1.5150	-1.3250	-1.3860	-1.5730	-1.271	-1.6270	-1.2170
1.060	-1.719	-1.0940	-1.5170	-1.3270	-1.3880	-1.5750	-1.272	-1.6290	-1.2190
1.061	-1.721	-1.0960	-1.5190	-1.3290	-1.3900	-1.5770	-1.273	-1.6310	-1.2210
1.062	-1.723	-1.0980	-1.5210	-1.3310	-1.3920	-1.5790	-1.274	-1.6330	-1.2230
1.063	-1.725	-1.1000	-1.5230	-1.3330	-1.3940	-1.5810	-1.275	-1.6350	-1.2250
1.064	-1.727	-1.1020	-1.5250	-1.3350	-1.3960	-1.5830	-1.276	-1.6370	-1.2270
1.065	-1.729	-1.1040	-1.5270	-1.3370	-1.3980	-1.5850	-1.277	-1.6390	-1.2290
1.066	-1.731	-1.1060	-1.5290	-1.3390	-1.4000	-1.5870	-1.278	-1.6410	-1.2310
1.067	-1.733	-1.1080	-1.5310	-1.3410	-1.4020	-1.5890	-1.279	-1.6430	-1.2330
1.068	-1.735	-1.1100	-1.5330	-1.3430	-1.4040	-1.5910	-1.280	-1.6450	-1.2350
1.069	-1.737	-1.1120	-1.5350	-1.3450	-1.4060	-1.5930	-1.281	-1.6470	-1.2370
1.070	-1.739	-1.1140	-1.5370	-1.3470	-1.4080	-1.5950	-1.282	-1.6490	-1.2390
1.071	-1.741	-1.1160	-1.5390	-1.3490	-1.4100	-1.5970	-1.283	-1.6510	-1.2410
1.072	-1.743	-1.1180	-1.5410	-1.3510	-1.4120	-1.5990	-1.284	-1.6530	-1.2430
1.073	-1.745	-1.1200	-1.5430	-1.3530	-1.4140	-1.6010	-1.285	-1.6550	-1.2450
1.074	-1.747	-1.1220	-1.5450	-1.3550	-1.4160	-1.6030	-1.286	-1.6570	-1.2470
1.075	-1.749	-1.1240	-1.5470	-1.3570	-1.4180	-1.6050	-1.287	-1.6590	-1.2490
1.076	-1.751	-1.1260	-1.5490	-1.3590	-1.4200	-1.6070	-1.288	-1.6610	-1.2510
1.077	-1.753	-1.1280	-1.5510	-1.3610	-1.4220	-1.6090	-1.289	-1.6630	-1.2530
1.078	-1.755	-1.1300	-1.5530	-1.3630	-1.4240	-1.6110	-1.290	-1.6650	-1.2550
1.079	-1.757	-1.1320	-1.5550	-1.3650	-1.4260	-1.6130	-1.291	-1.6670	-1.2570
1.080	-1.759	-1.1340	-1.5570	-1.3670	-1.4280	-1.6150	-1.292	-1.6690	-1.2590
1.081	-1.761	-1.1360	-1.5590	-1.3690	-1.4300	-1.6170	-1.293	-1.6710	-1.2610
1.082	-1.763	-1.1380	-1.5610	-1.3710	-1.4320	-1.6190	-1.294	-1.6730	-1.2630
1.083	-1.765	-1.1400	-1.5630	-1.3730	-1.4340	-1.6210	-1.295	-1.6750	-1.2650
1.084	-1.767	-1.1420	-1.5650	-1.3750	-1.4360	-1.6230	-1.296	-1.6770	-1.2670
1.085	-1.769	-1.1440	-1.5670	-1.3770	-1.4380	-1.6250	-1.297	-1.6790	-1.2690
1.086	-1.771	-1.1460	-1.5690	-1.3790	-1.4400	-1.6270	-1.298	-1.6810	-1.2710
1.087	-1.773	-1.1480	-1.5710	-1.3810	-1.4420	-1.6290	-1.299	-1.6830	-1.2730
1.088	-1.775	-1.1500	-1.5730	-1.3830	-1.4440	-1.6310	-1.300	-1.6850	-1.2750
1.089	-1.777	-1.1520	-1.5750	-1.3850	-1.4460	-1.6330	-1.301	-1.6870	-1.2770
1.090	-1.779	-1.1540	-1.5770	-1.3870	-1.4480	-1.6350	-1.302	-1.6890	-1.2790
1.091	-1.781	-1.1560	-1.5790	-1.3890	-1.4500	-1.6370	-1.303	-1.6910	-1.2810
1.092	-1.783	-1.1580	-1.5810	-1.3910	-1.4520	-1.6390	-1.304	-1.6930	-1.2830
1.093	-1.785	-1.1600	-1.5830	-1.3930	-1.4540	-1.6410	-1.305	-1.6950	-1.2850
1.094	-1.787	-1.1620	-1.5850	-1.3950	-1.4560	-1.6430	-1.306	-1.6970	-1.2870
1.095	-1.789	-1.1640	-1.5870	-1.3970	-1.4580	-1.6450	-1.307	-1.6990	-1.2890
1.096	-1.791	-1.1660	-1.5890	-1.3990	-1.4600	-1.6470	-1.308	-1.7010	-1.2910
1.097	-1.793	-1.1680	-1.5910	-1.4010	-1.4620	-1.6490	-1.309	-1.7030	-1.2930
1.098	-1.795	-1.1700	-1.5930	-1.4030	-1.4640	-1.6510	-1.310	-1.7050	-1.2950
1.099	-1.797	-1.1720	-1.5950	-1.4050	-1.4660	-1.6530	-1.311	-1.7070	-1.2970
1.100	-1.799	-1.1740	-1.5970	-1.4070	-1.4680	-1.6550	-1.312	-1.7090	-1.2990
1.101	-1.801	-1.1760	-1.5990	-1.4090	-1.4700	-1.6570	-1.313	-1.7110	-1.3010
1.102	-1.803	-1.1780	-1.6010	-1.4110	-1.4720	-1.6590	-1.314	-1.7130	-1.3030
1.103	-1.805	-1.1800	-1.6030	-1.4130	-1.4740	-1.6610	-1.315	-1.7150	-1.3050
1.104	-1.807	-1.1820	-1.6050	-1.4150	-1.4760	-1.6630	-1.316	-1.7170	-1.3070
1.105	-1.809	-1.1840	-1.6070	-1.4170	-1.4780	-1.6650	-1.317	-1.7190	-1.3090
1.106	-1.811	-1.1860	-1.6090	-1.4190	-1.4800	-1.6670	-1.318	-1.7210	-1.3110
1.107	-1.813	-1.1880	-1.6110	-1.4210	-1.4820	-1.6690	-1.319	-1.7230	-1.3130
1.108	-1.815	-1.1900	-1.6130	-1.4230	-1.4840	-1.6710	-1.320	-1.7250	-1.3150
1.109	-1.817	-1.1920	-1.6150	-1.4250	-1.4860	-1.6730	-1.321	-1.7270	-1.3170
1.110	-1.819	-1.1940	-1.6170	-1.4270	-1.4880	-1.6750	-1.322	-1.7290	-1.3190
1.111	-1.821	-1.1960	-1.6190	-1.4290	-1.4900	-1.6770	-1.323	-1.7310	-1.3210
1.112	-1.823	-1.1980	-1.6210	-1.4310	-1.4920	-1.6790	-1.324	-1.7330	-1.3230
1.113	-1.825	-1.2000	-1.6230	-1.4330	-1.4940	-1.6810	-1.325	-1.7350	-1.3250
1.114	-1.827	-1.2020	-1.6250	-1.4350	-1.4960	-1.6830	-1.326	-1.7370	-1.3270
1.115	-1.829	-1.2040	-1.6270	-1.4370	-1.4980	-1.6850	-1.327	-1.7390	-1.3290
1.116	-1.831	-1.2060	-1.6290	-1.4390	-1.5000	-1.6870	-1.328	-1.7410	-1.3310
1.117	-1.833	-1.2080	-1.6310	-1.4410	-1.5020	-1.6890	-1.329	-1.7430	-1.3330
1.118	-1.835	-1.2100	-1.6330	-1.4430	-1.5040	-1.6910	-1.330	-1.7450	-1.3350
1.119	-1.837	-1.2120	-1.6350	-1.4450	-1.5060	-1.6930	-1.331	-1.7470	-1.3370
1.120	-1.839	-1.2140	-1.6370	-1.4470	-1.5080	-1.6950	-1.332	-1.7490	-1.3390
1.121	-1.841	-1.2160	-1.6390	-1.4490	-1.5100	-1.6970	-1.333	-1.7510	-1.3410
1.122	-1.843	-1.2180	-1.6410	-1.4510	-1.5120	-1.6990	-1.334	-1.7530	-1.3430
1.123	-1.845	-1.2200	-1.6430	-1.4530	-1.5140	-1.7010	-1.335	-1.7550	-1.3450
1.124	-1.847	-1.2220	-1.6450	-1.4550	-1.5160	-1.7030	-1.336	-1.7570	-1.3470
1.125	-1.849	-1.2240	-1.6470	-1.4570	-1.5180	-1.7050	-1.337	-1.7590	-1.3490
1.126	-1.851	-1.2260	-1.6490	-1.4590	-1.5200	-1.7070	-1.338	-1.7610	-1.3510
1.127	-1.853	-1.2280	-1.6510	-1.4610	-1.5220	-1.7090	-1.339	-1.7630	-1.3530
1.128	-1.855	-1.2300	-1.6530	-1.4630	-1.5240	-1.7110	-1.340	-1.7650	-1.3550
1.129	-1.857	-1.2320	-1.6550	-1.4650	-1.5260	-1.7130	-1.341	-1.7670	-1.3570
1.130	-1.859	-1.2340	-1.6570	-1.4670	-1.5280	-1.7150	-1.342	-1.7690	-1.3590
1.131	-1.861	-1.2360	-1.6590	-1.4690	-1.5300	-1.7170	-1.343	-1.7710	-1.3610
1.132	-1.863	-1.2380	-1.6610	-1.4710	-1.5320	-1.7190	-1.344	-1.7730	-1.3630
1.133	-1.865	-1.2400	-1.6630	-1.4730	-1.5340	-1.7210	-1.345	-1.7750	-1.3650
1.134	-1.867	-1.2420	-1.6650	-1.4750	-1.5360	-1.7230	-1.346	-1.7770	-1.3670
1.135	-1.869	-1.2440	-1.6670	-1.4770	-1.5380	-1.7250	-1.347	-1.7790	-1.3690
1.136	-1.871	-1.2460	-1.6690	-1.4790	-1.5400	-1.7270	-1.348	-1.7810	-1.3710
1.137	-1.873	-1.2480	-1.6710	-1.4810	-1.5420	-1.7290	-1.349	-1.7830	-1.3730
1.138	-1.875	-1.2500	-1.6730	-1.4830	-1.5440	-1.7310	-1.350	-1.7850	-1.3750
1.139	-1.877	-1.2520	-1.6750	-					

DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ010) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA =  
 AILRON =  
 SPDRK =  
 ELEV-L =

## PARAMETRIC DATA

.0000 ELEVON = .0000  
 .0000 BOFLAP = 16.300  
 25.0000 RUDDER = .0000  
 .0000 ELEV-R = .0000

RUN NO. 305/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHLL	CHLR	CHBF	Q
1.199	-664	-00650	00440	-07500	-06370	-21600	567.90000
1.201	059	-00600	00370	-07400	-06210	-22060	567.90000
1.199	1079	-00550	00300	-07300	-06080	-22780	567.90000
1.196	1368	-00570	00790	-07270	-06090	-23170	567.90000
1.200	3324	-00540	00380	-07080	-05930	-24710	567.90000
1.198	7372	-00490	00260	-06860	-05880	-28040	567.90000
1.197	9546	-00520	00430	-06790	-05860	-29670	567.90000
1.197	12370	-00390	00410	-06720	-05880	-32280	567.90000
1.198	15610	-00590	00910	-06980	-06260	-34120	567.90000
1.192	18650	-00770	01160	-07270	-06630	-36410	567.90000
1.200	21670	-00100	01360	-07390	-06580	-39360	567.90000
1.187	24660	-00150	01610	-07610	-06310	-41900	567.90000
1.195	28600	-00480	01930	-07290	-04670	-43590	567.90000
	GRADIENT	00024	00736	00098	00081	-000747	000000

ARC 11-747 QAS3A B C H F W V NOM. RN/L

(BE 0511) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 139/ 0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.598	-.634	-.00320	.05840	.02300	.08140	-.03790	-.04620	-.03680	-.04410	-.01220	475.70000
.598	.105	-.00240	.05870	.02290	.08170	-.03730	-.04560	-.03660	-.04390	-.01210	475.70000
.598	1.200	-.00350	.05900	.02280	.08170	-.03810	-.04620	-.03660	-.04410	-.01160	475.70000
.600	1.709	-.00310	.05910	.02270	.08180	-.03780	-.04600	-.03630	-.04430	-.01150	475.70000
.600	3.663	-.00370	.05900	.02110	.08010	-.03750	-.04600	-.03620	-.04370	-.01100	475.70000
.600	5.691	-.00390	.05740	.01740	.07480	-.03750	-.04640	-.03610	-.04390	-.01050	475.70000
.598	7.735	-.00410	.05380	.01260	.06640	-.03790	-.04670	-.03620	-.04440	-.01060	475.70000
.598	9.708	-.00480	.04830	.00660	.05480	-.03790	-.04720	-.03620	-.04410	-.01210	475.70000
.598	12.770	-.00320	.03600	-.00410	.03190	-.03750	-.04650	-.03620	-.04450	-.01970	475.70000
.599	15.830	-.00350	.02190	-.01890	.00300	-.03820	-.04680	-.03660	-.04490	-.03370	475.70000
.599	18.890	-.00420	-.00640	-.03270	-.03920	-.04020	-.04850	-.03820	-.04630	-.05350	475.70000
.598	21.890	-.00290	-.00510	-.04220	-.04740	-.04170	-.05140	-.04050	-.04980	-.06000	475.70000
.598	24.930	-.00230	-.00350	-.05470	-.05340	-.04540	-.05510	-.04430	-.05390	-.06500	475.70000
.598	28.990	-.00530	-.00710	-.02320	-.04730	-.05330	-.06590	-.05080	-.06310	-.05850	475.70000
GRADIENT		-.00018	.00014	-.00043	-.00031	.00004	-.00000	.00014	.00006	.00029	.00000

RUN NO. 138/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.797	-.666	-.00520	.06400	.02570	.08970	-.03610	-.04670	-.03370	-.04380	-.00240	637.70000
.805	.225	-.00420	.06500	.02580	.09080	-.03550	-.04640	-.03380	-.04400	-.00170	637.70000
.799	1.245	-.00530	.06610	.02630	.09240	-.03600	-.04630	-.03390	-.04350	-.00120	637.70000
.802	1.767	-.00460	.06640	.02620	.09260	-.03590	-.04600	-.03340	-.04380	-.00050	637.70000
.801	3.718	-.00500	.06840	.02630	.09470	-.03550	-.04630	-.03390	-.04290	.00110	637.70000
.800	5.721	-.00420	.06860	.02240	.09100	-.03600	-.04590	-.03390	-.04340	.00120	637.70000
.800	7.779	-.00480	.06480	.01240	.07720	-.03590	-.04650	-.03390	-.04370	.00250	637.70000
.799	9.776	-.00440	.05670	.00010	.05660	-.03520	-.04670	-.03330	-.04410	.00270	637.70000
.803	12.810	-.00460	.04380	-.00460	.03930	-.03490	-.04710	-.03300	-.04450	-.00280	637.70000
.803	15.870	-.00440	.02120	-.01730	.00280	-.03510	-.04890	-.03380	-.04450	-.01750	637.70000
.800	18.930	-.00490	.01260	-.03430	-.02180	-.03800	-.05360	-.03660	-.05000	-.02060	637.70000
.796	21.990	-.00760	-.00730	-.02810	-.03540	-.04050	-.05800	-.03950	-.05140	-.01890	637.70000
.797	25.120	-.01440	-.02430	-.02240	-.04670	-.05060	-.06430	-.04760	-.05300	-.02370	637.70000
.800	29.150	-.01130	-.03480	-.02240	-.05730	-.05430	-.07090	-.05230	-.06150	-.01460	637.70000
GRADIENT		-.00002	.00009	.00015	.00114	.00009	.00009	-.00002	.00022	.00080	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F M V N M L

(BEJ011) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .000 ELEVON = .000  
 AIRLON = .000 BOFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 137/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.905	-.662	-.00770	.08510	-.04120	-.05480	-.03750	-.05080	-.00290	618.60000
.901	.205	-.00680	.08200	-.04020	-.05420	-.03730	-.05020	.00030	618.60000
.903	1.242	-.00710	.08250	-.03990	-.05350	-.03680	-.04950	.00080	618.60000
.901	1.754	-.00730	.08470	-.03990	-.05410	-.03680	-.04990	-.00040	618.60000
.903	3.702	-.00650	.08890	-.03770	-.05330	-.03500	-.04950	.00010	618.60000
.903	5.695	-.00550	.09110	-.03460	-.05130	-.03270	-.04770	.00620	618.60000
.900	7.745	-.00490	.09390	-.02970	-.04920	-.02770	-.04630	.01380	618.60000
.898	9.720	-.00450	.08690	-.02970	-.04960	-.02890	-.04600	.02470	618.60000
.902	12.750	-.00580	.03770	-.03180	-.05000	-.02940	-.04670	.02670	618.60000
.900	15.800	-.00540	.00490	-.03570	-.05440	-.03360	-.05110	.03230	618.60000
.900	18.880	-.00980	.00120	-.03980	-.06230	-.03940	-.05750	.06730	618.60000
.898	21.990	-.01040	-.01880	-.05410	-.06770	-.05070	-.06160	.08170	618.60000
.897	25.090	-.01480	-.04090	-.06530	-.06220	-.06000	-.05260	.05850	618.60000
.896	29.090	-.00990	-.07320	-.07970	-.05890	-.07430	-.05440	.05390	618.60000
GRADIENT		.00020	.00112	-.00022	.00074	.00057	.00027	.00048	.00000

RUN NO. 136/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
1.052	-.650	-.01090	.07380	-.07410	-.07560	-.06630	-.07250	.02390	628.00000
1.051	.178	-.01020	.07000	-.07220	-.07370	-.06490	-.07070	.03420	628.00000
1.052	1.177	-.01050	.06480	-.07070	-.07210	-.06340	-.06300	.04920	628.00000
1.050	1.667	-.01100	.06290	-.07030	-.07150	-.06250	-.06820	.05510	628.00000
1.051	3.585	-.01260	.05480	-.06780	-.07020	-.05990	-.06550	.06150	628.00000
1.050	5.549	-.01320	.04630	-.06590	-.06800	-.05740	-.06320	.06330	628.00000
1.049	7.601	-.01280	.04050	-.06150	-.06460	-.05320	-.06010	.06330	628.00000
1.052	9.577	-.01470	.02860	-.06020	-.06230	-.05050	-.05730	.06240	628.00000
1.051	12.610	-.00970	-.01620	-.05980	-.06140	-.05490	-.05830	.05750	628.00000
1.048	15.690	-.01230	-.06780	-.05240	-.05140	-.04440	-.04710	.05220	628.00000
1.051	18.720	-.00860	-.03310	-.04560	-.04420	-.03940	-.04190	.03430	628.00000
1.051	21.740	-.01060	-.02780	-.04500	-.04640	-.03920	-.04170	.00810	628.00000
1.049	24.820	-.00140	-.02660	-.07950	-.05130	-.07720	-.05510	-.00380	628.00000
1.048	28.930	-.01140	-.05090	-.09090	-.06930	-.09200	-.06680	-.03600	628.00000
GRADIENT		-.00047	-.00450	.00144	.00124	.00151	.00163	.00006	.00000

ARC 11-747 0A53A B C M F W1 V NDM. RN/L

(BEJ011) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YREF = 32.3010 IN.  
LREF = 14.2440 IN. YREF = .0000 IN.  
BREF = 28.1044 IN. ZREF = 11.2500 IN.  
SCALE = .0300 SCALE

### PARAMETRIC DATA

BETA	=	.000	ELEWON	=	.000
AILRON	=	.000	BDFLAP	=	-11.700
SPDBRK	=	25.000	RODDER	=	.000
ELEV-L	=	.000	ELEV-R	=	.000

RUN NO. 135/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.202	-.660	-.00900	.08410	.02020	.10420	-.05970	-.06960	-.05380	-.06680	.04660	567.000000
1.202	.125	-.00800	.07860	.01470	.09330	-.05850	-.06850	-.05300	-.06600	.04880	567.000000
1.203	1.122	-.00850	.07030	.00850	.07860	-.05700	-.06750	-.05110	-.06490	.04700	567.000000
1.202	1.627	-.00870	.06660	.00550	.07210	-.05640	-.06680	-.05020	-.06430	.04680	567.000000
1.203	3.540	-.00850	.05280	-.00500	.04780	-.05440	-.06620	-.04850	-.06360	.04260	567.000000
1.204	5.511	-.00780	.03990	-.01470	.02520	-.05260	-.06560	-.04730	-.06230	.03580	567.000000
1.198	7.563	-.00840	.02570	-.02510	.00060	-.05030	-.06550	-.04570	-.06220	.03380	567.000000
1.199	9.537	-.00830	.00810	-.03580	-.02770	-.05010	-.06440	-.04430	-.06180	.02830	567.000000
1.202	12.580	-.00790	-.02890	-.04590	-.07470	-.04900	-.06340	-.04370	-.06090	.01570	567.000000
1.200	15.610	-.00830	-.07750	-.05380	-.13730	-.05190	-.06460	-.04610	-.06210	.00480	567.000000
1.201	18.650	-.01070	-.11310	-.07450	-.18760	-.05470	-.06670	-.04790	-.06280	-.00670	567.000000
1.200	21.690	-.00720	-.12730	-.08600	-.21330	-.05090	-.06780	-.04360	-.05890	-.01930	567.000000
1.199	24.720	.00630	-.15970	-.08990	-.24990	-.05640	-.05160	-.05570	-.05460	-.04190	567.000000
1.198	28.730	-.01040	-.18010	-.09480	-.27490	-.07820	-.04750	-.06900	-.04630	-.06560	567.000000
	GRADIENT	.00000	-.00751	-.00596	-.01345	.00126	.00081	.00126	.00078	-.00014	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 295

ARC 11-747 QAS3A B C H F W V NOM. RN/L

(BEJ012) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 154/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.600	-4.934	-.02450	.05450	.02230	.07690	-.02940	-.05030	-.01810	-.03710	-.01150	478.10000
.602	-2.947	-.01860	.05640	.02300	.07940	-.02630	-.04440	-.01690	-.03520	-.01070	478.10000
.602	-.963	-.00790	.05780	.02300	.08080	-.02180	-.04030	-.01820	-.03590	-.01210	478.10000
.599	.027	-.00150	.05910	.02320	.08230	-.01870	-.03870	-.01880	-.03720	-.01160	478.10000
.599	1.056	.00440	.05970	.02320	.08290	-.01670	-.03770	-.02030	-.03890	-.01200	478.10000
.599	3.107	.01490	.06130	.02320	.08440	-.01230	-.03530	-.02140	-.04110	-.01120	478.10000
.600	5.164	.02320	.06280	.02370	.08640	-.01090	-.03410	-.02360	-.04470	-.01210	478.10000
.601	6.894	.03030	.06350	.02350	.08700	-.00680	-.03950	-.02680	-.04980	-.01530	478.10000
GRADIENT		.00507	.00085	.00010	.00093	.00219	.00185	-.00049	-.00055	-.00004	-.00000

RUN NO. 149/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.799	-4.953	-.02780	.05930	.02460	.08380	-.02930	-.05410	-.01630	-.03930	-.00150	640.20000
.801	-2.958	-.02080	.06160	.02540	.08700	-.02410	-.04870	-.01440	-.03750	-.00100	640.20000
.803	-.971	-.00970	.06370	.02560	.08940	-.01900	-.04460	-.01530	-.03860	-.00260	640.20000
.802	.026	-.00270	.06490	.02600	.09090	-.01620	-.04210	-.01580	-.03980	-.00180	640.20000
.803	1.060	.00400	.06550	.02590	.09150	-.01430	-.04000	-.01710	-.04110	-.00140	640.20000
.800	3.118	.01520	.06780	.02620	.09400	-.00990	-.03770	-.01860	-.04420	-.00010	640.20000
.799	5.183	.02370	.06910	.02630	.09540	-.00710	-.03740	-.02010	-.04820	-.00150	640.20000
.798	7.077	.03600	.07070	.02660	.09730	-.00340	-.04390	-.02330	-.05620	-.00380	640.20000
GRADIENT		.00549	.00104	.00019	.00125	.00243	.00207	-.00035	-.00065	-.00013	.00000

RUN NO. 148/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.900	-4.948	-.03210	.06280	.02740	.09020	-.03900	-.06320	-.02620	-.04590	.00360	612.40000
.905	-2.964	-.02320	.07210	.03100	.10300	-.02970	-.05520	-.01950	-.04230	.00150	612.40000
.904	-.970	-.01120	.08030	.03430	.11460	-.02380	-.05030	-.01920	-.04380	-.00120	612.40000
.902	.029	-.00500	.08230	.03490	.11720	-.02120	-.04800	-.01950	-.04470	.00060	612.40000
.901	1.056	.00240	.08400	.03550	.11950	-.01830	-.04530	-.02050	-.04550	.00220	612.40000
.899	3.120	.01640	.08790	.03630	.12420	-.01480	-.04240	-.02350	-.05010	.00260	612.40000
.903	5.183	.02610	.08780	.03670	.12450	-.01790	-.04480	-.02940	-.05940	.00340	612.40000
.901	7.150	.04020	.08900	.03690	.12590	-.00510	-.05030	-.03010	-.06550	.00280	612.40000
GRADIENT		.00606	.00311	.00112	.00424	.00298	.00277	.00025	-.00055	-.00008	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0A53A

PAGE 296

ARC 11-747 0A53A B C M F W V NOM. RN/L

(0EJ012) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA =  
 AILRON =  
 SPOBRK =  
 ELEV-L =

.0000 ELEVON = .0000  
 .0000 BDPLAF = -11.7000  
 25.0000 RUDDER = .0000  
 .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 143/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.051	-4.949	-.05890	.06210	.04200	.04200	-.08160	-.07680	-.04400	-.05440	.05370	624.30000
1.051	-2.959	-.03460	.06540	.04220	.04220	-.07050	-.07300	-.04820	-.06160	.03230	624.30000
1.056	-.971	-.01810	.07050	.04070	.04070	-.06470	-.07090	-.05170	-.06580	.03030	624.30000
1.055	.030	-.00970	.07180	.03970	.03970	-.05980	-.06900	-.05280	-.06630	.02940	624.30000
1.054	1.062	-.00010	.07390	.03950	.03950	-.05530	-.06640	-.05470	-.06690	.03090	624.30000
1.052	3.120	.01520	.07490	.03630	.03630	-.04810	-.06370	-.05730	-.06970	.04830	624.30000
1.047	5.177	.04070	.08050	.03050	.03050	-.03660	-.05820	-.06040	-.07510	.04950	624.30000
1.051	7.056	.07590	.08990	.02580	.02580	-.01630	-.05710	-.06540	-.08390	.04990	624.30000
GRADIENT		.06907	.06170	-.00070	.00099	.00398	.00162	-.00164	-.00185	-.00076	.00000

RUN NO. 140/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.203	-4.944	-.06640	.06730	.02680	.02680	-.08660	-.07480	-.04990	-.04510	.04160	571.60000
1.204	-2.956	-.04230	.07140	.02170	.02170	-.07700	-.06970	-.05300	-.05150	.04450	571.60000
1.204	-.964	-.02110	.07700	.01800	.01800	-.06630	-.06400	-.05400	-.05520	.04730	571.60000
1.200	.023	-.00850	.07970	.01600	.01600	-.06110	-.06120	-.05550	-.05830	.04850	571.60000
1.200	1.060	.00450	.08140	.01360	.01360	-.05550	-.05840	-.05670	-.06160	.04920	571.60000
1.200	3.115	.02980	.08320	.00980	.00980	-.04680	-.05200	-.06120	-.06740	.04490	571.60000
1.203	5.179	.05920	.08810	.00680	.00680	-.03390	-.04580	-.06460	-.07420	.04220	571.60000
1.200	6.907	.08720	.09050	.00510	.00510	-.01830	-.04330	-.06740	-.08130	.04040	571.60000
GRADIENT		.01187	.00229	-.00209	.00021	.00503	.00282	-.00129	-.00271	.00060	.00000



DATE 06 JUL 74

## TABULATED SOURCE DATA - Q453A

PAGE 297

ARC 11-717 Q453A B C H F W V NOM. RN/L

(BEJ011) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .0000  
 AIRLON = .0000 BOFLAP = -11.700  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 153/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-5.018	-.02580	.04220	.00870	.05100	-.02950	-.05140	-.01950	-.03560	-.01590	474.60000
.597	-2.998	-.01690	.04400	.00820	.05220	-.02490	-.04580	-.01740	-.03640	-.01540	474.60000
.601	-.980	-.00810	.04660	.00690	.05350	-.02000	-.04220	-.01700	-.03720	-.01370	474.60000
.601	.027	-.00240	.04740	.00630	.05360	-.01770	-.04010	-.01730	-.03820	-.01280	474.60000
.600	1.040	.00340	.04820	.00580	.05400	-.01550	-.03850	-.01820	-.03920	-.01380	474.60000
.600	3.061	.01360	.05110	.00520	.05630	-.01230	-.03740	-.02060	-.04280	-.01490	474.60000
.600	5.080	.02120	.05380	.00520	.05910	-.01250	-.03690	-.02300	-.04760	-.01650	474.60000
.599	7.105	.03330	.05620	.00530	.06150	-.00580	-.02980	-.02460	-.04440	-.02370	474.60000
.599	9.123	.05160	.05900	.00580	.06480	.00480	-.03110	-.02760	-.05020	-.02580	474.60000
GRADIENT		.00510	.00113	-.00050	.00463	.00209	.00143	-.00053	-.00105	.00007	.00000

RUN NO. 150/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.799	-5.035	-.02850	.05020	.00280	.04930	-.02840	-.05230	-.01720	-.03510	-.00190	639.70000
.798	-3.009	-.02030	.05290	.00120	.05180	-.02350	-.04740	-.01500	-.03500	-.00050	639.70000
.799	-.987	-.01020	.05650	.00030	.05680	-.01900	-.04420	-.01530	-.03770	.00060	639.70000
.802	.029	-.00250	.05630	-.00120	.05510	-.01710	-.04170	-.01680	-.03950	.00170	639.70000
.799	1.049	.00480	.05740	-.00130	.05610	-.01440	-.04010	-.01760	-.04170	.00220	639.70000
.797	3.067	.01730	.06080	-.00030	.06070	-.01060	-.03630	-.01910	-.04500	.00140	639.70000
.799	5.101	.02450	.06330	.00060	.06390	-.01100	-.03620	-.02230	-.04940	.00030	639.70000
.798	7.131	.03780	.06530	.00140	.06660	-.00660	-.03730	-.02590	-.05580	-.00150	639.70000
.797	9.158	.06310	.06820	.00210	.07030	.01050	-.03010	-.02670	-.05590	-.00570	639.70000
GRADIENT		.00640	.00121	.00008	.00128	.00214	.00185	-.00072	-.00168	.00036	.00000

RUN NO. 147/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.034	-.03670	.06410	.00570	.06980	-.03080	-.05880	-.01770	-.03510	.02540	613.50000
.904	-3.009	-.02530	.07110	.00500	.07610	-.02490	-.05130	-.01480	-.03600	.02670	613.50000
.905	-.986	-.01070	.07770	.00490	.08250	-.02080	-.04550	-.01680	-.03880	.02850	613.50000
.905	.029	-.00230	.07960	.00470	.08440	-.01760	-.04340	-.01760	-.04110	.03020	613.50000
.903	1.044	.00450	.08110	.00450	.08570	-.01530	-.04140	-.01830	-.04190	.02880	613.50000
.900	3.074	.01960	.09030	.00600	.09630	-.01160	-.03690	-.02030	-.04770	.02680	613.50000
.899	5.108	.03220	.09390	.00730	.10120	-.01180	-.03530	-.02390	-.05540	.02840	613.50000
.899	7.140	.04550	.09390	.00640	.10020	-.00780	-.03520	-.02790	-.06050	.03130	613.50000
.901	9.164	.06930	.09250	.00790	.10040	.00730	-.02760	-.02840	-.06110	.02620	613.50000
GRADIENT		.00739	.00301	.00013	.00315	.00224	.00238	-.00089	-.00188	.00003	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NM, RN/L

(06J013) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 144/ 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.055	-5.026	-.07690	-.02760	-.02790	-.02040	-.07960	-.06490	-.02870	-.03900	.05710	628.10000
1.055	-3.007	-.04690	.01290	-.02990	-.01740	-.06340	-.06190	-.03180	-.04650	.06810	628.10000
1.055	-.984	-.02430	.02130	-.02380	-.02850	-.04810	-.05950	-.03310	-.05020	.06150	628.10000
1.054	.027	-.00610	.02270	-.02360	-.00690	-.04080	-.05620	-.03700	-.05400	.06300	628.10000
1.056	1.047	.00830	.02290	-.02980	-.00690	-.03380	-.05330	-.03980	-.05560	.06250	628.10000
1.054	3.069	.03760	.03030	-.02890	.00150	-.02390	-.05220	-.05020	-.06350	.06250	628.10000
1.051	5.097	.06740	.03740	-.02710	.01020	-.01460	-.04480	-.05620	-.07070	.05940	628.10000
1.051	7.123	.08770	.04310	-.02620	.01690	-.00030	-.03950	-.05540	-.07150	.05430	628.10000
1.055	9.150	.11470	.04480	-.02610	.01870	.02050	-.03260	-.05830	-.06850	.04930	628.10000
GRADIENT	.01412	.00271	.00015	.00288	.00655	.00174	.00306	.00278	.00040	.00000	

RUN NO. 141/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.204	-5.028	-.04060	-.04880	-.03580	-.04460	-.06700	-.05460	-.03780	-.04330	.01980	571.40000
1.200	-3.008	-.02530	-.00410	-.03770	-.04180	-.06100	-.05810	-.04250	-.05130	.02540	571.40000
1.200	-.985	-.01370	.00180	-.03800	-.03620	-.05410	-.05770	-.04490	-.05320	.02660	571.40000
1.199	.023	-.00770	.00400	-.03790	-.03380	-.05090	-.05710	-.04580	-.05440	.02650	571.40000
1.199	1.042	-.00220	.00540	-.03780	-.03240	-.04780	-.05580	-.04650	-.05490	.02650	571.40000
1.198	3.067	.01180	.01020	-.03660	-.02640	-.04070	-.05070	-.04880	-.05440	.02560	571.40000
1.197	5.089	.03250	.01360	-.03540	-.02180	-.02530	-.04090	-.04710	-.05160	.02140	571.40000
1.202	7.121	.06730	.01460	-.03420	-.01960	-.00670	-.03410	-.05000	-.05800	.01860	571.40000
1.201	9.146	.09640	.01550	-.03380	-.01830	-.00730	-.03200	-.05480	-.06640	.01590	571.40000
GRADIENT	.00606	.00230	.00017	.00247	.00332	.00119	.00119	.00101	-.00054	.00002	

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 299

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ014) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 152/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.599	-5.004	-.04020	-.00970	-.03510	-.04470	-.03540	-.06220	-.02340	-.03410	-.05410	476.90000
.601	-2.993	-.02450	-.00660	-.03750	-.04410	-.02970	-.05210	-.01980	-.03750	-.05750	476.90000
.599	-.985	-.00820	-.00660	-.03880	-.04540	-.02300	-.04670	-.02000	-.04140	-.05660	476.90000
.596	.024	-.00230	-.00730	-.03920	-.04650	-.02000	-.04320	-.02040	-.04240	-.05970	476.90000
.598	1.041	-.00620	-.00580	-.03950	-.04530	-.01720	-.04180	-.02130	-.04400	-.05830	476.90000
.598	3.070	-.02330	-.00420	-.03850	-.04270	-.01270	-.03740	-.02360	-.04980	-.05460	476.90000
.599	5.090	-.03370	-.00540	-.03830	-.04370	-.01450	-.03660	-.02720	-.05960	-.05370	476.90000
.601	7.116	-.04790	-.00670	-.03680	-.04350	-.01000	-.03810	-.03110	-.06480	-.06360	476.90000
.599	9.142	-.07260	-.00970	-.03690	-.04660	-.00560	-.03120	-.03120	-.06700	-.07520	476.90000
GRADIENT		-.00781	-.00040	-.00018	-.00021	-.00281	-.00249	-.00063	-.00195	-.00035	.00000

RUN NO. 151/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.798	-5.049	-.03490	-.01490	-.03600	-.02120	-.03870	-.05160	-.01950	-.03590	-.01400	638.20000
.800	-3.014	-.02580	-.00890	-.03470	-.02580	-.03240	-.05420	-.01840	-.04250	-.01860	638.20000
.797	-.977	-.01130	-.00300	-.03510	-.03210	-.02450	-.05320	-.01980	-.04660	-.02050	638.20000
.798	.035	-.00420	-.00160	-.03690	-.03480	-.02040	-.05120	-.02070	-.04670	-.02030	638.20000
.800	1.058	-.00440	-.00050	-.03790	-.03740	-.01630	-.04760	-.02190	-.04640	-.01960	638.20000
.799	3.096	-.01780	-.00180	-.03950	-.04140	-.01010	-.04170	-.02490	-.04480	-.01940	638.20000
.800	5.139	-.02670	-.00320	-.04170	-.04490	-.00730	-.03650	-.02660	-.04390	-.01920	638.20000
.799	7.182	-.03960	-.00450	-.03880	-.04330	-.00640	-.02800	-.03080	-.04320	-.01970	638.20000
.798	9.223	-.06940	-.00840	-.03280	-.04120	-.00840	-.01320	-.02960	-.04420	-.02660	638.20000
GRADIENT		-.00719	-.00170	-.00084	-.00256	-.00369	-.00212	-.00106	-.00033	-.00007	.00000

RUN NO. 146/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.056	-.03540	-.00130	-.03670	-.03800	-.04590	-.04820	-.01820	-.04050	-.07590	613.50000
.906	-3.011	-.02220	-.00020	-.04400	-.04380	-.04340	-.05670	-.02610	-.05180	-.07860	613.50000
.899	-.984	-.01360	-.00420	-.04180	-.04600	-.03470	-.06100	-.02730	-.05480	-.07630	613.50000
.900	.034	-.00800	-.00090	-.04500	-.05410	-.03200	-.06140	-.03020	-.05530	-.07940	613.50000
.904	1.058	-.00280	-.01370	-.04590	-.05960	-.02970	-.06060	-.03400	-.05350	-.08120	613.50000
.897	3.098	-.01120	-.00190	-.04380	-.05470	-.01820	-.05190	-.03400	-.04740	-.07260	613.50000
.902	5.143	-.02620	-.02190	-.04900	-.07090	-.01320	-.04320	-.03350	-.04500	-.07540	613.50000
.906	7.184	-.03680	-.02050	-.04680	-.07340	-.00480	-.02610	-.03170	-.03600	-.07610	613.50000
.902	9.230	-.06050	-.01990	-.04020	-.06810	-.01380	-.01690	-.02720	-.03640	-.06240	613.50000
GRADIENT		-.00545	-.00010	-.00017	-.00227	-.00396	-.00073	-.00149	-.00071	-.00064	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

## REFERENCE DATA

SREF = 2.4210 SQ-FT. XMRP = 32.3010 IN.  
 CREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

(BEJ014) (12 MAR 74)

## PARAMETRIC DATA

ALPHA = 20.000 ELEMN = .0000  
 AILRON = .0000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 145/0 RN/L = 3.48 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHL	CHLL	CHUR	CHLR	CHBF	Q
1.035	-5.039	-0.8110	-1.1208	-0.7090	-1.1918	-0.8570	-0.4580	-0.2040	-0.2980	-0.1690	627.60000
1.035	-3.012	-0.3370	-1.1268	-0.7870	-1.2055	-0.5350	-0.2950	-0.2170	-0.2850	-0.2060	627.60000
1.033	-0.990	-0.1860	-1.1326	-0.8110	-1.2130	-0.3710	-0.3970	-0.2380	-0.3450	-0.2210	627.60000
1.032	.019	-0.0870	-1.1269	-0.8090	-1.2069	-0.3100	-0.4010	-0.2660	-0.3580	-0.2040	627.60000
1.032	1.049	-0.0160	-1.1214	-0.7830	-1.1970	-0.2450	-0.3610	-0.2650	-0.3240	-0.2160	627.60000
1.031	3.060	0.1980	-1.1159	-0.8090	-1.1740	-0.1100	-0.3170	-0.3790	-0.2460	-0.1860	627.60000
1.049	5.121	0.7060	-1.1180	-0.8110	-1.1929	0.0130	-0.3650	-0.6160	-0.4420	-0.2240	627.60000
1.033	7.165	1.0510	-1.1266	-0.8170	-1.2043	0.0990	-0.3340	-0.6790	-0.6070	-0.2110	627.60000
1.031	9.196	1.2500	-1.1038	-0.7870	-1.1825	0.0900	-0.2590	-0.8110	-0.6880	-0.1990	627.60000
	GRADIENT	0.03674	0.0208	-0.0219	0.0189	0.0695	-0.0014	-0.0267	0.0068	-0.0032	.00000

RUN NO. 142/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHL	CHLL	CHUR	CHLR	CHBF	Q
1.202	-5.033	-0.3900	-1.1294	-0.7530	-1.2047	-0.6770	-0.4300	-0.3630	-0.3540	-0.1670	571.00000
1.205	-3.015	-0.3440	-1.1310	-0.7940	-1.2110	-0.6330	-0.4910	-0.3670	-0.3940	-0.1990	571.00000
1.204	-0.988	-0.2720	-1.1293	-0.8100	-1.2130	-0.6050	-0.6000	-0.4470	-0.4460	-0.1290	571.00000
1.202	.027	-0.0970	-1.1261	-0.8110	-1.2070	-0.5350	-0.5740	-0.4790	-0.5330	-0.1310	571.00000
1.202	1.045	0.0020	-1.1323	-0.8270	-1.1990	-0.4450	-0.5090	-0.4980	-0.5570	-0.1330	571.00000
1.199	3.078	0.2300	-1.1350	-0.8260	-1.1790	-0.2740	-0.3670	-0.4450	-0.4260	-0.1910	571.00000
1.199	5.121	0.2990	-1.1320	-0.8320	-1.2110	-0.2140	-0.3560	-0.4720	-0.3370	-0.1670	571.00000
1.201	7.157	0.7690	-1.1230	-0.7820	-1.2030	-0.0800	-0.3220	-0.5650	-0.6160	-0.0830	571.00000
1.203	9.196	1.0770	-1.1240	-0.7650	-1.2010	0.0510	-0.2900	-0.6720	-0.6440	-0.0530	571.00000
	GRADIENT	0.01032	0.00468	-0.0056	0.0124	0.0609	0.0228	-0.0111	-0.0082	0.0009	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 301

ARC 11-747 QAS3A B C M F W V LOW RN/L

(BEJ015) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    XMRP = 32.3010 IN.  
 LREF = 14.2440 IN.    YMRP = .0000 IN.  
 BREF = 28.1004 IN.    ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000    ELEVW = .000  
 ALLCON = .000    BDFLAP = .000  
 SPBRK = 25.000    RUDDER = .000  
 ELEV-L = .000    ELEV-R = .000

RUN NO. 324/ 0    RN/L = 1.77    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHCO	CHLL	CHUR	CHLR	CHCF	Q
.597	-.529	.00160	.05580	.02230	-.02060	-.03950	-.04000	-.01660	208.70000
.603	.089	-.00070	.05640	.02230	-.02140	-.03940	-.03970	-.02510	208.70000
.604	1.102	.00040	.05540	.02260	-.02050	-.03910	-.03960	-.02570	208.70000
.597	1.612	.00000	.05720	.02320	-.02120	-.03970	-.04020	-.02120	208.70000
.605	3.559	-.00010	.05840	.02210	-.02050	-.03880	-.03910	-.01930	208.70000
.594	5.555	.00000	.05680	.01870	-.02110	-.03990	-.04000	-.02170	208.70000
.601	7.601	-.00010	.05160	.01380	-.02120	-.03960	-.03970	-.03240	208.70000
.597	9.598	-.00010	.04540	.00640	-.02110	-.03970	-.03990	-.03850	208.70000
.598	12.590	-.00050	.03080	-.01050	-.02140	-.03850	-.03920	-.04050	208.70000
.594	15.660	.00000	.00930	-.02160	-.02120	-.04040	-.04050	-.06970	208.70000
.604	18.700	-.00130	-.01370	-.03670	-.02140	-.04030	-.04050	-.07920	208.70000
.595	21.730	.00010	-.01550	-.04670	-.02360	-.04300	-.04430	-.08320	208.70000
.601	24.680	.00000	-.04190	-.04080	-.02830	-.04710	-.04810	-.08600	208.70000
.599	28.490	-.00100	-.04060	-.02470	-.03950	-.05550	-.05760	-.09012	.00000
GRADIENT		-.00022	.00062	-.00001	.00008	.00015	.00017		

RUN NO. 319/ 0    RN/L = 2.08    GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHCO	CHLL	CHUR	CHLR	CHCF	Q
.797	-.631	.00040	.06120	.02530	-.02170	-.04370	-.04370	-.03000	310.80000
.802	.087	-.00030	.06040	.02540	-.02250	-.04240	-.04270	-.02980	310.80000
.797	1.121	.00080	.06230	.02560	-.02200	-.04270	-.04380	-.02790	310.80000
.797	1.637	.00120	.06310	.02630	-.02140	-.04280	-.04380	-.02790	310.80000
.802	3.591	.00100	.06750	.02870	-.02150	-.04220	-.04330	-.03030	310.80000
.797	5.549	-.00080	.06800	.02310	-.02240	-.04270	-.04380	-.02580	310.80000
.800	7.624	.00020	.06250	.01240	-.02130	-.04250	-.04350	-.03140	310.80000
.798	9.589	.00030	.05090	.00040	-.02180	-.04260	-.04380	-.03300	310.80000
.801	12.620	-.00130	.03970	.00350	-.02150	-.04370	-.04390	-.04390	310.80000
.800	15.690	.00090	.01200	-.01750	-.02360	-.04460	-.04520	-.05790	310.80000
.796	18.720	-.00100	-.00220	-.03330	-.02560	-.04800	-.04790	-.06390	310.80000
.800	21.750	-.00050	-.01330	-.04120	-.03020	-.05140	-.05270	-.07060	310.80000
.798	24.690	-.00370	-.02950	-.02150	-.03750	-.05490	-.05620	-.08780	310.80000
.797	28.610	-.00710	-.03800	-.02300	-.04690	-.05840	-.05990	-.10340	310.80000
GRADIENT		.00025	.00162	.00082	.00014	.00025	.00015		

DATE 06 JUL 74

## TABULATED SOURCE DATA - OMSSA

PAGE 302

ARC 11-747 OMSSA B C M F W V LOW RN/L

(BEJ015) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = .0000  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 318/0 RN/L = 2.18 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHLL	CHUR	CHLR	CHEF
.899	-1.637	-1.00190	.0685	.03200	.02770	-1.0050	-1.04900
.900	.000	-1.00140	.07390	.03270	-1.02760	-1.04960	-1.02600
.905	1.087	-1.00270	.07560	.02780	-1.02790	-1.05000	-1.02630
.910	1.586	-1.00310	.07780	.02550	-1.02750	-1.05010	-1.02560
.915	3.555	-1.00230	.06620	.03260	-1.02600	-1.04870	-1.02460
.920	5.557	-1.00230	.06730	.02490	-1.02530	-1.04680	-1.02350
.925	7.606	-1.00000	.06960	.01520	-1.02550	-1.04530	-1.02400
.930	9.566	-1.00070	.07890	.00700	-1.02500	-1.04480	-1.02400
.935	12.610	-1.00040	.07920	.00640	-1.02450	-1.04480	-1.02400
.940	15.640	-1.00130	.06600	.01270	-1.02410	-1.04480	-1.02350
.945	18.670	-1.00220	.05940	.01420	-1.03560	-1.04390	-1.02640
.950	20.730	-1.00310	.05190	.01560	-1.03920	-1.03410	-1.02580
.955	24.700	-1.00470	.04500	.01670	-1.03920	-1.03750	-1.02750
.960	28.620	-1.00790	.03620	.01800	-1.06180	-1.06330	-1.05950
GRADIENT		-1.00015	.00392	.00320	-1.07020	-1.05220	-1.06620
					.00040	.00009	.00047

RUN NO. 313/0 RN/L = 2.27 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHLL	CHUR	CHLR	CHEF
1.031	-1.637	-1.00740	.08110	.04010	-1.07360	-1.07590	-1.07580
1.034	.051	-1.00590	.07610	.03790	-1.07030	-1.07270	-1.07270
1.037	1.069	-1.00620	.07470	.03780	-1.07130	-1.06590	-1.07390
1.040	1.584	-1.00670	.07200	.02880	-1.06650	-1.06110	-1.06330
1.043	3.559	-1.00760	.06380	.01670	-1.06340	-1.05710	-1.06740
1.045	5.579	-1.00850	.05540	.00140	-1.06000	-1.05450	-1.06420
1.048	7.574	-1.00820	.04740	.01340	-1.05670	-1.05260	-1.06700
1.052	9.550	-1.00610	.02440	.02710	-1.05270	-1.05040	-1.06460
1.052	11.550	-1.00620	.00620	.03640	-1.05160	-1.05510	-1.06460
1.051	15.650	-1.00790	.00620	.03610	-1.04720	-1.05320	-1.05740
1.051	18.660	-1.01010	.00620	.03610	-1.04520	-1.05110	-1.05740
1.049	21.700	-1.01390	.00460	.04450	-1.03630	-1.04550	-1.05250
1.050	24.660	-1.01500	.01280	.04130	-1.03600	-1.04380	-1.05250
1.050	28.610	-1.01570	.01370	.04130	-1.06150	-1.04350	-1.04350
1.045		-1.01420	.01510	.04350	-1.06220	-1.04350	-1.04350
GRADIENT		-1.00016	.00372	.00235	-1.07070	-1.06370	-1.06370
					.00019	.00019	.00019

ARC 11-747 0453A B C M F M V LOW RN/L

(0EJ015) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10000 IN.  
 BREF = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = 1.300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEMN = .0000  
 AILRON = .0000 BDFLAP = .0000  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 3127.0 RN/L = 2.30 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.193	-1.651	-0.06690	0.06110	-0.02310	0.05920	-0.07540	-0.06530	-0.07140	-0.06350	-0.02840	438.900000
1.197	0.060	-0.05590	0.06090	0.01790	0.03880	-0.07440	-0.06310	-0.06990	-0.06180	-0.03110	438.900000
1.201	1.068	-0.00320	0.07280	0.01100	0.03380	-0.07250	-0.06100	-0.06830	-0.06000	-0.03630	438.900000
1.201	1.587	-0.05540	0.06940	0.00790	0.07730	-0.07190	-0.06090	-0.06780	-0.05950	-0.03900	438.900000
1.201	3.519	-0.06610	0.05590	-0.00410	0.05180	-0.07040	-0.06040	-0.06550	-0.05930	-0.04730	438.900000
1.201	5.516	-0.04420	0.04420	-0.01620	0.02810	-0.06800	-0.06000	-0.06450	-0.05920	-0.05640	438.900000
1.201	7.573	-0.03590	0.02740	-0.02600	0.01140	-0.06680	-0.06030	-0.06240	-0.05870	-0.06360	438.900000
1.197	9.540	-0.06620	0.00720	-0.03520	-0.02820	-0.06500	-0.06050	-0.06180	-0.05870	-0.07310	438.900000
1.196	12.570	-0.03550	-0.03160	-0.04740	-0.07800	-0.06380	-0.05920	-0.05950	-0.05800	-0.03260	438.900000
1.197	15.650	-0.06620	-0.02250	-0.05960	-0.14210	-0.06570	-0.06020	-0.06130	-0.05840	-0.0920	438.900000
1.194	18.680	-0.06610	-0.12490	-0.07450	-0.15340	-0.07120	-0.06510	-0.06620	-0.06410	-0.13400	438.900000
1.195	21.670	-0.03300	-0.13700	-0.08390	-0.22090	-0.06840	-0.05930	-0.06520	-0.05950	-0.16370	438.900000
1.195	24.660	-0.00300	-0.16540	-0.09170	-0.25710	-0.06880	-0.05540	-0.06600	-0.05840	-0.19470	438.900000
1.194	28.570	-0.04470	-0.18320	-0.09630	-0.27950	-0.07230	-0.04860	-0.06370	-0.04650	-0.22900	438.900000
GRADIENT	0.00015	-0.00725	-0.00849	-0.00849	-0.01374	-0.00122	0.00110	0.01121	0.00098	-0.00461	0.00000

ARC 11-747 QAS3A B C M F M V NOM. RN/L

(BCJ016) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    MGRP = 32.3010 IN.  
 LREF = 14.2440 IN.    YGRP = .0000 IN.  
 BREF = 26.1104 IN.    ZGRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000    ELEVEN = .0000  
 ALLEN = .0000    CDFAP = .0000  
 SPDF = .25    RUDDER = .0000  
 ELEV = .0000    ELEV = .0000

RUN NO. 323/0    RN/L = 3.98    GRADIENT INTERVAL = -5.00/ 5.00

WCH	ALPHA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.597	-1.590	-0.00120	.05650	.02230	-.02040	-.04120	-.02000	-.04040	-.03280	479.70000
.60	-1.01	-0.00120	.05580	.02210	-.02040	-.04040	-.01980	-.03990	-.03200	479.70000
.596	1.129	-0.00120	.05620	.02200	-.02050	-.04020	-.01960	-.04020	-.03320	479.70000
.60	1.625	-0.00150	.05690	.02210	-.02050	-.04100	-.01950	-.04120	-.03000	479.70000
.599	3.162	-0.00100	.05600	.02240	-.02050	-.04170	-.01930	-.04100	-.03150	479.70000
.599	5.544	-0.0120	.05410	.016	-.02040	-.04120	-.01980	-.04060	-.03170	479.70000
.596	7.615	-0.00100	.05030	.01170	-.02050	-.04130	-.01990	-.04080	-.03150	479.70000
.596	8.595	-0.00100	.04500	.00600	-.02050	-.04130	-.01990	-.04080	-.03150	479.70000
.599	12.610	-0.0150	.03400	-.00420	-.02040	-.04170	-.01970	-.04080	-.03120	479.70000
.595	15.640	-0.010	.01940	-.01710	-.02090	-.04100	-.02040	-.04130	-.05450	479.70000
.596	18.700	-0.0000	-.01130	-.03240	-.02190	-.04170	-.02130	-.04160	-.07540	479.70000
.596	21.700	-0.0000	-.01130	-.04450	-.02360	-.04420	-.02280	-.04410	-.08350	479.70000
.596	24.700	-0.0000	-.01130	-.07320	-.02750	-.04780	-.02650	-.04630	-.09110	479.70000
.597	26.650	-0.0000	-.01350	-.08220	-.04010	-.05620	-.03020	-.05350	-.10140	479.70000
GRADIENT	.00000	.00000	-.00006	-.00043	-.00003	-.00003	-.00004	-.00003	-.00029	.00000

RUN NO. 327/0    RN/L = 4.22    GRADIENT INTERVAL = -5.00/ 5.00

WCH	ALPHA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.601	-1.664	-0.00160	.06000	.02460	-.02160	-.04420	-.02060	-.04360	-.03330	641.10000
.798	.064	-0.00110	.06170	.02500	-.02140	-.04430	-.02000	-.04400	-.03330	641.10000
.603	1.034	-0.00060	.06240	.02530	-.02190	-.04420	-.02040	-.04420	-.03350	641.10000
.603	1.632	-0.00130	.06290	.02560	-.02120	-.04410	-.02030	-.04370	-.03330	641.10000
.799	3.579	-0.00140	.06430	.02550	-.02100	-.04410	-.02000	-.04330	-.03370	641.10000
.798	5.576	-0.00100	.06510	.02260	-.02110	-.04420	-.02030	-.04380	-.03420	641.10000
.799	7.635	-0.00060	.06150	.01530	-.02110	-.04390	-.02040	-.04300	-.03480	641.10000
.747	9.619	-0.00080	.05390	.00420	-.02150	-.04430	-.02030	-.04450	-.03480	641.10000
.799	12.610	-0.00150	.04240	-.00590	-.02140	-.04430	-.02070	-.04430	-.03580	641.10000
.795	15.700	-0.002	.01410	-.01720	-.02280	-.04460	-.02030	-.04450	-.03670	641.10000
.601	18.760	-0.00220	.00740	-.03640	-.02370	-.04490	-.02040	-.04450	-.03640	641.10000
.796	21.720	-0.00360	-.01310	-.05800	-.02910	-.04510	-.02050	-.04500	-.03640	641.10000
.797	24.690	-0.0000	-.02950	-.08200	-.03660	-.04680	-.02050	-.04520	-.03700	641.10000
.799	26.640	-0.01100	-.03560	-.08250	-.04700	-.04650	-.02050	-.04560	-.03700	641.10000
GRADIENT	.00000	.00000	.00004	.00021	.00003	.00004	.00004	.00001	.00000	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 305

ARC 11-747 0453A B C N F W V NOK. RN/L

(BEJ016) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = .000  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 317/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHCO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.900	-0.66	-0.0500	.07250	.1340	.10590	-.02870	-.05130	-.02620	-.04880	-.03900	611.60000
.905	-.076	-.00480	.07330	.03320	.10640	-.02840	-.05140	-.02630	-.04870	-.03920	611.60000
.902	1.085	-.00550	.07390	.03200	.10600	-.02760	-.05130	-.02560	-.04780	-.03910	611.60000
.901	1.604	-.00510	.07440	.03080	.10520	-.02720	-.05090	-.02520	-.04770	-.03940	611.60000
.902	3.544	-.00440	.07950	.02980	.10930	-.02620	-.05010	-.02420	-.04770	-.04230	611.60000
.901	5.531	-.00460	.08560	.02420	.10980	-.02510	-.04880	-.02280	-.04650	-.04420	611.60000
.900	7.598	-.00300	.09090	.01500	.10640	-.02480	-.04790	-.02300	-.04650	-.04610	611.60000
.899	9.564	-.00160	.08540	.00620	.09170	-.02440	-.04710	-.02360	-.04620	-.04670	611.60000
.900	12.590	-.00220	.05140	-.00450	.04690	-.02410	-.04710	-.02310	-.04590	-.05230	611.60000
.903	15.670	-.00280	.00330	-.02290	-.01960	-.02790	-.05140	-.02700	-.04940	-.05870	611.60000
.898	18.680	-.00370	-.00430	-.03910	-.04340	-.03480	-.05910	-.03380	-.05640	-.06820	611.60000
.899	21.720	-.00560	-.01930	-.04760	-.06700	-.04520	-.06410	-.04440	-.05930	-.07540	611.60000
.901	24.720	-.00610	-.03680	-.06310	-.08310	-.05870	-.05400	-.05570	-.05090	-.11550	611.60000
.902	28.620	-.00570	-.07020	-.03390	-.10410	-.07120	-.05250	-.06640	-.05190	-.13240	611.60000
GRADIENT		.00012	.00163	-.00093	.00071	.00061	.00031	.00052	.00029	-.00076	.00000

RUN NO. 314/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHCO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.047	-0.655	-.00610	.07490	.04130	.11620	-.07070	-.07610	-.06540	-.07530	-.01310	623.90000
1.052	.067	-.00690	.07190	.03900	.11090	-.07020	-.07570	-.06440	-.07450	-.01280	623.90000
1.052	1.067	-.00720	.06570	.03430	.10000	-.06690	-.07220	-.06110	-.07100	-.01670	623.90000
1.049	1.588	-.00640	.06410	.03080	.09490	-.06570	-.07120	-.06020	-.07040	-.01620	623.90000
1.051	3.534	-.00760	.05540	.01960	.07500	-.06280	-.06970	-.05740	-.06750	-.02190	623.90000
1.051	5.518	-.00900	.04740	.00180	.04920	-.06000	-.06770	-.05390	-.06480	-.02390	623.90000
1.052	7.570	-.00880	.04210	-.01310	.02890	-.05900	-.06330	-.04920	-.06030	-.03540	623.90000
1.052	9.556	-.01000	.02950	-.02490	.00460	-.05260	-.06040	-.04590	-.05710	-.04170	623.90000
1.051	12.590	-.00570	-.01700	-.04270	-.05970	-.05720	-.06170	-.05290	-.06030	-.05660	623.90000
1.051	15.640	-.00870	-.00680	-.05550	-.12400	-.04370	-.04910	-.03270	-.04630	-.07500	623.90000
1.048	18.680	-.00740	-.01440	-.07080	-.17520	-.03770	-.04250	-.03270	-.04010	-.10170	623.90000
1.049	21.690	-.00560	-.11050	-.07920	-.18470	-.03770	-.04140	-.03780	-.04140	-.14030	623.90000
1.048	24.670	-.00210	-.13060	-.08230	-.21290	-.06380	-.05050	-.06690	-.04960	-.16360	623.90000
1.049	28.620	-.02230	-.14730	-.06890	-.21620	-.10300	-.07460	-.08890	-.06580	-.20980	623.90000
GRADIENT		-.00028	-.00470	-.00029	.00099	.00201	.00166	.00198	.00194	-.00221	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

(0EJ016) ( 12 MAR 74 )

ARC 11-747 QAS3A B C M F W V NOM. RN/L

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2800 IN.  
 SCALE = .0300 SCALE

BETA =  
 ALLRON =  
 SPDRK =  
 ELEV-L =

ELEVON = .000  
 BDELAP = .000  
 RUDDER = .000  
 ELEV-R = .000

PARAMETRIC DATA

RUN NO. 311/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.203	-1.650	-0.0670	.08370	.01900	.10270	-.07530	-.06430	-.07190	-.06220	-.02370	570.70000
1.203	.051	-0.0630	.07820	.01460	.09270	-.07430	-.06330	-.06990	-.06140	-.03310	570.70000
1.203	1.072	-0.0590	.07000	.00850	.07450	-.07210	-.06190	-.06800	-.06010	-.01660	570.70000
1.201	1.565	-0.0620	.06610	.00580	.07190	-.07150	-.06190	-.06750	-.05970	-.03890	570.70000
1.200	3.537	-0.0580	.05220	-.00550	.04670	-.06890	-.06090	-.06490	-.05900	-.04690	570.70000
1.201	5.523	-0.0570	.03930	-.01390	.02530	-.06720	-.06080	-.06340	-.05800	-.05450	570.70000
1.197	7.571	-0.0570	.02610	-.02500	.00110	-.06530	-.06100	-.06150	-.05910	-.07260	570.70000
1.197	9.532	-0.0590	.00790	-.03470	-.02680	-.06330	-.06100	-.05890	-.05810	-.09130	570.70000
1.196	12.590	-0.0430	-.02760	-.04510	-.07270	-.06170	-.05920	-.06100	-.05930	-.10820	570.70000
1.196	15.600	-0.0560	-.07960	-.05870	-.13830	-.06480	-.06540	-.06480	-.06360	-.13120	570.70000
1.197	18.670	-0.0590	-.12120	-.07370	-.19490	-.06900	-.05960	-.06470	-.06040	-.16080	570.70000
1.196	21.670	-0.0120	-.13350	-.08310	-.21660	-.06670	-.05960	-.06550	-.05740	-.19160	570.70000
1.197	24.660	-0.0150	-.16340	-.08950	-.25280	-.06910	-.05540	-.06550	-.04510	-.22510	570.70000
1.195	28.600	-0.0050	-.18400	-.09610	-.28010	-.07050	-.04540	-.07130	-.04077	-.00406	570.70000
	GRADIENT	.00019	-.00754	-.00583	-.01336	.00159	.00079	.00044			



ARC 11-747 0453A B C M F W V HIGH RN/L

(BEJ017) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = .0000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 322/0 RN/L = 5.45 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUL	CHUR	CHLR	CHFR	Q
.597	-1.592	-0.00180	.05590	.02210	.07800	-.02080	-.04170	-.05010	-.04050	-.03450	781.20000	
.597	.100	-0.00160	.05590	.02210	.07800	-.02050	-.04180	-.01990	-.04090	-.03420	781.20000	
.597	1.147	-0.00230	.05560	.02160	.07720	-.02070	-.04180	-.01990	-.04030	-.03470	781.20000	
.595	1.602	-0.00210	.05580	.02130	.07720	-.02070	-.04190	-.01990	-.04060	-.03530	781.20000	
.597	3.564	-0.00210	.05540	.01940	.07480	-.02090	-.04200	-.02000	-.04080	-.03580	781.20000	
.596	5.538	-0.00190	.05420	.01610	.07030	-.02090	-.04220	-.02010	-.04110	-.03610	781.20000	
.596	7.605	-0.00190	.05040	.01170	.06210	-.02060	-.04250	-.02000	-.04120	-.03660	781.20000	
.597	9.587	-0.00210	.04540	.00700	.05240	-.02100	-.04290	-.02010	-.04140	-.03880	781.20000	
.596	12.600	-0.00210	.03740	-.00070	.03670	-.02100	-.04270	-.02010	-.04150	-.04500	781.20000	
.597	15.670	-0.00220	.01740	-.01710	.00030	-.02190	-.04280	-.02120	-.04200	-.05620	781.20000	
.598	18.720	-0.00150	-.00930	-.02770	-.03700	-.02360	-.04490	-.02310	-.04450	-.07390	781.20000	
.595	21.710	-0.00100	-.01160	-.04260	-.05430	-.02360	-.04930	-.02610	-.04800	-.08460	781.20000	
.595	24.710	-0.00270	-.03270	-.04170	-.07440	-.02750	-.05960	-.03830	-.05840	-.09170	781.20000	
.597	28.640	-0.00280	-.03010	-.02220	-.05230	-.03990	-.05960	-.03830	-.05840	-.10380	781.20000	
GRADIENT		-.00010	-.00012	-.00067	-.00079	-.00005	-.00007	.00001	-.00003	-.00037	.00000 0	

RUN NO. 321/0 RN/L = 5.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUL	CHUR	CHLR	CHFR	Q
.799	-1.605	-0.00190	.06140	.02490	.08630	-.02130	-.04510	-.02040	-.04410	-.03450	830.90000	
.803	.097	-0.00130	.06190	.02490	.08690	-.02120	-.04480	-.02040	-.04430	-.03440	830.90000	
.804	1.088	-0.00150	.06280	.02510	.08790	-.02130	-.04480	-.02030	-.04420	-.03440	830.90000	
.799	1.644	-0.00150	.06350	.02520	.08870	-.02100	-.04450	-.02040	-.04360	-.03410	830.90000	
.798	3.567	-0.00130	.06500	.02500	.09000	-.02100	-.04450	-.02030	-.04390	-.03440	830.90000	
.799	5.564	-0.00120	.06550	.02200	.08750	-.02090	-.04410	-.02020	-.04350	-.03460	830.90000	
.796	7.602	-0.00130	.06310	.01580	.07900	-.02100	-.04490	-.02040	-.04420	-.03610	830.90000	
.800	9.581	-0.00150	.05640	.00150	.05780	-.02110	-.04480	-.02030	-.04410	-.03730	830.90000	
.799	12.620	-0.00160	.04410	-.00640	.03770	-.02140	-.04540	-.02080	-.04440	-.04460	830.90000	
.799	15.690	-0.00160	.01500	-.01640	-.00140	-.02260	-.04650	-.02210	-.04540	-.06340	830.90000	
.793	18.700	-0.00180	.00530	-.03600	-.03010	-.02460	-.04950	-.02410	-.04820	-.06980	830.90000	
.798	21.740	-0.00430	-.01250	-.03740	-.05090	-.02880	-.05490	-.02830	-.05110	-.07350	830.90000	
.799	24.670	-0.00990	-.02840	-.02280	-.05120	-.03610	-.06130	-.03580	-.05170	-.09360	830.90000	
.798	28.620	-0.01060	-.03150	-.02030	-.05180	-.04510	-.06640	-.04580	-.05560	-.10640	830.90000	
GRADIENT		-.00009	.00008	.00004	.00091	.00007	.00014	.00002	.00009	.00003	.00001	

ARC 11-747 QAS3A B C M F W V HIGH RN/L

(BEJ017) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRCON = .000 BDELAP = .000  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 316/ 0 RN/L = 4.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.901	-1.675	-1.00400	.07260	.03200	.10460	-.02880	-.05110	-.02660	-.04940	-.04880	783.10000
.898	.077	-.00440	.07460	.03210	.10670	-.02840	-.05160	-.02630	-.04940	-.04890	783.10000
.901	1.093	-.00520	.07410	.03190	.10600	-.02750	-.05100	-.02530	-.04800	-.04810	783.10000
.899	1.607	-.00440	.07610	.03220	.10830	-.02720	-.05080	-.02520	-.04840	-.04110	783.10000
.900	3.538	-.00450	.08010	.02920	.10930	-.02610	-.05030	-.02400	-.04790	-.04190	783.10000
.900	5.527	-.00260	.08910	.02750	.11660	-.02540	-.04920	-.02390	-.04820	-.04520	783.10000
.903	7.595	-.00210	.09680	.01570	.11250	-.02540	-.04700	-.02420	-.04680	-.04860	783.10000
.900	9.575	-.00260	.09160	.00770	.09920	-.02430	-.04750	-.02320	-.04590	-.05150	783.10000
.900	12.590	-.00280	.05610	-.00010	.05090	-.02430	-.04770	-.02320	-.04680	-.06680	783.10000
.900	15.640	-.00320	.01470	-.02160	-.00590	-.02740	-.05150	-.02570	-.05000	-.06770	783.10000
.903	18.710	-.00360	-.00220	-.03980	-.04210	-.03520	-.05360	-.03390	-.05730	-.06770	783.10000
.901	21.730	-.00500	-.02080	-.04200	-.06290	-.04630	-.06510	-.04470	-.06170	-.07780	783.10000
.900	24.720	-.01070	-.03830	-.02750	-.06580	-.05980	-.06650	-.05710	-.05260	-.11780	783.10000
.903	28.670	-.00720	-.06840	-.03310	-.10130	-.07270	-.05450	-.06810	-.05190	-.13590	783.10000
GRADIENT		-.00009	.00169	-.00065	.00104	.00065	.00025	.00063	.00039	-.00026	.00000

RUN NO. 315/ 0 RN/L = 4.51 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.053	-1.656	-.00710	.07420	.03480	.11300	-.07210	-.07760	-.06650	-.07620	-.01150	812.60000
1.053	.073	-.00640	.06870	.03660	.10520	-.06910	-.07430	-.06410	-.07360	-.01540	812.60000
1.048	1.083	-.00700	.06380	.03110	.09490	-.06690	-.07280	-.06120	-.07120	-.01500	812.60000
1.052	1.598	-.00620	.06140	.02780	.08920	-.06640	-.07200	-.06140	-.07080	-.01340	812.60000
1.054	3.548	-.00810	.05320	.01500	.06820	-.06350	-.07140	-.05790	-.06790	-.02320	812.60000
1.050	5.526	-.00980	.04600	.00310	.04910	-.06070	-.06820	-.05430	-.06480	-.02970	812.60000
1.050	7.583	-.00990	.04030	-.01180	.02850	-.05580	-.06460	-.04960	-.06190	-.03750	812.60000
1.050	9.563	-.01190	.03250	-.02550	.00690	-.05140	-.06090	-.04330	-.05640	-.04360	812.60000
1.052	12.580	-.00540	-.01330	-.04280	-.05610	-.05960	-.06450	-.05590	-.05320	-.05660	812.60000
1.050	15.640	-.00670	-.00510	-.05460	-.11970	-.04420	-.04990	-.04000	-.04740	-.07370	812.60000
1.057	18.690	-.00800	-.00940	-.06850	-.16310	-.04030	-.04470	-.03530	-.04160	-.10300	812.60000
1.050	21.700	-.00190	-.10430	-.07860	-.18290	-.04090	-.04480	-.04160	-.04210	-.13740	812.60000
1.053	24.690	-.00060	-.12840	-.08280	-.21120	-.06260	-.05160	-.06550	-.04710	-.15350	812.60000
1.051	28.820	-.02440	-.14730	-.06790	-.21520	-.10490	-.07890	-.08990	-.06960	-.20400	812.60000
GRADIENT		-.00026	-.00047	-.00059	-.01065	.00133	.00163	.00137	.00189	-.00263	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 303

ARC 11-747 QAS3A B C M F W V HIGH RN/L

(BEJ017) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = .0000  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 310 / 0 RN/L = 4.27 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHP	CHET	CHL	CHLL	CHLR	CHLF	Q
1.196	-0.653	-0.00700	0.0240	0.0190	-0.06570	-0.06790	-0.03140	814.800000
1.204	-0.551	-0.00670	0.07740	0.01330	-0.06340	-0.06670	-0.03560	814.800000
1.201	1.082	-0.00720	0.07030	0.00810	-0.06270	-0.06520	-0.03920	814.800000
1.203	1.573	-0.00650	0.06730	0.00540	-0.06190	-0.06480	-0.04170	814.800000
1.202	3.519	-0.00630	0.05340	0.00270	-0.06110	-0.06290	-0.04960	814.800000
1.204	5.501	-0.00630	0.03780	0.00000	-0.06130	-0.06180	-0.05900	814.800000
1.199	7.568	-0.00570	0.02420	0.00360	-0.06110	-0.05980	-0.05910	814.800000
1.199	9.551	-0.00600	0.00920	0.03460	-0.06080	-0.05880	-0.05860	814.800000
1.198	12.550	-0.00580	0.02380	0.04530	-0.05940	-0.05640	-0.05750	814.800000
1.198	15.630	-0.00750	0.07510	0.05780	-0.06280	-0.06050	-0.05960	814.800000
1.196	18.680	-0.00730	0.11340	0.07270	-0.06610	-0.06380	-0.06330	814.800000
1.197	21.670	-0.00770	0.13410	0.08160	-0.06490	-0.06330	-0.06010	814.800000
1.199	24.660	-0.00440	0.15860	0.08710	-0.05820	-0.06660	-0.05780	814.800000
1.198	28.580	-0.00050	0.18140	0.09480	-0.04630	-0.06820	-0.04640	814.800000
	GRADIENT	0.00016	-0.00692	-0.00509	0.00100	0.00118	0.00094	0.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QM53A

PAGE 310

ARC 11-747 QM53A B C M F W V LOW RN/L

(BEJ018) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 339/ 0 RN/L = 1.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-1.607	-.00650	.19610	.09170	.28780	-.01980	-.03860	-.01810	-.03380	.03590	208.10000
.599	-1.105	-.00570	.19460	.09000	.28460	-.01980	-.03760	-.01810	-.03360	.04680	208.10000
.603	1.136	-.00530	.19110	.08810	.27920	-.01940	-.03800	-.01790	-.03420	.04400	208.10000
.603	1.635	-.00480	.19190	.08740	.27930	-.01940	-.03730	-.01760	-.03440	.04250	208.10000
.603	3.591	-.00450	.19150	.08580	.27730	-.01940	-.03730	-.01730	-.03460	.05010	208.10000
.599	5.556	-.00600	.19180	.08170	.27250	-.01970	-.03780	-.01700	-.03440	.03570	208.10000
.597	7.628	-.00560	.19140	.07760	.26890	-.01980	-.03760	-.01710	-.03460	.04480	208.10000
.597	9.602	-.00610	.18800	.07000	.25800	-.01980	-.03780	-.01760	-.03380	.04090	208.10000
.599	12.660	-.00570	.18530	.05320	.23840	-.01970	-.03840	-.01810	-.03420	.04300	208.10000
.598	15.710	-.00740	.17950	.03440	.21390	-.01970	-.03780	-.01700	-.03300	.03190	208.10000
.596	18.730	-.00790	.15150	.02360	.17520	-.01980	-.03870	-.01720	-.03350	.01430	208.10000
.596	21.750	-.00730	.15350	.01830	.17180	-.02200	-.04020	-.01840	-.03650	.01160	208.10000
.598	24.710	-.00550	.16010	.01750	.17760	-.02520	-.04370	-.02250	-.04100	-.00690	208.10000
.598	28.250	-.00380	.10910	.02620	.13530	-.03210	-.04520	-.02910	-.04440	-.00430	208.10000
GRADIENT		.00036	-.00109	-.00138	-.00247	.00011	.00026	.00021	-.00023	.00246	.00000

RUN NO. 334/ 0 RN/L = 2.09 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-1.633	-.00150	.22500	.10370	.32870	-.02190	-.04170	-.02010	-.04200	.03270	312.30000
.795	.090	-.00100	.22580	.10200	.32780	-.02270	-.04100	-.02070	-.04200	.03240	312.30000
.803	1.135	-.00130	.22840	.09930	.32770	-.02120	-.04220	-.01980	-.04230	.03810	312.30000
.810	1.686	-.00260	.22810	.09780	.32590	-.02150	-.04260	-.01970	-.04180	.03390	312.30000
.814	3.597	-.00120	.22560	.09530	.32100	-.02090	-.04170	-.01950	-.04190	.03880	312.30000
.805	5.596	-.00140	.21950	.07800	.30730	-.02090	-.04190	-.01990	-.04160	.03680	312.30000
.803	7.589	-.00180	.21280	.06970	.28240	-.02100	-.04240	-.01990	-.04180	.03300	312.30000
.803	9.583	-.00200	.21150	.05140	.26280	-.02110	-.04220	-.01950	-.04170	.03460	312.30000
.802	12.620	-.00130	.21110	.03000	.24120	-.02080	-.04220	-.02000	-.04180	.03790	312.30000
.807	15.700	-.00410	.17740	.01910	.19650	-.02150	-.04410	-.01970	-.04180	.03740	312.30000
.803	18.740	-.00360	.15770	.01100	.16870	-.02410	-.04630	-.02270	-.04500	.02690	312.30000
.798	21.730	-.00450	.16200	.02200	.18400	-.02870	-.05080	-.02570	-.04930	.01700	312.30000
.801	24.730	-.00490	.14070	.03130	.17200	-.03400	-.05150	-.03240	-.04820	.02360	312.30000
.801	28.600	-.00660	.09700	.02670	.12370	-.04290	-.05260	-.03960	-.04930	.04010	312.30000
GRADIENT		-.00004	.00013	-.00202	-.00180	.00033	-.00011	.00022	.00003	.00147	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V LOW RN/L

(8EJ018) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -20.0000  
 ALLCON = .0000 BDFLAP = -111.7000  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 333/0 RN/L = 2.19 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.904	-1.633	-0.00620	.28610	.13350	.42460	-0.03030	-0.03420	-0.02750	-0.05070	.01860	357.900000
.904	.070	-0.00540	.28560	.13610	.42170	-0.03020	-0.03300	-0.02700	-0.05070	.01700	357.900000
.904	1.112	-0.00640	.27850	.13070	.40920	-0.03020	-0.03270	-0.02600	-0.05020	.01610	357.900000
.905	1.615	-0.00530	.28030	.12280	.40300	-0.02950	-0.03270	-0.02690	-0.05010	.01610	357.900000
.910	3.536	-0.00610	.27310	.10130	.37440	-0.02870	-0.03290	-0.02560	-0.04980	.02000	357.900000
.910	5.554	-0.00560	.27140	.07920	.35060	-0.02740	-0.03120	-0.02440	-0.04860	.01560	357.900000
.906	7.637	-0.00380	.26470	.05990	.32420	-0.02640	-0.02870	-0.02420	-0.04710	.01930	357.900000
.902	9.579	-0.00240	.26870	.03480	.30350	-0.02490	-0.02790	-0.02340	-0.04700	.02360	357.900000
.901	12.640	-0.00350	.22940	.02730	.25670	-0.02450	-0.02850	-0.02520	-0.04620	.02070	357.900000
.902	15.690	-0.00430	.19030	.02450	.21470	-0.02790	-0.03140	-0.02960	-0.04970	.02450	357.900000
.902	18.700	-0.00570	.17140	.01790	.18940	-0.03160	-0.03640	-0.03460	-0.05270	.01930	357.900000
.897	21.760	-0.00540	.15360	.02350	.17700	-0.03780	-0.05750	-0.03460	-0.05520	.02190	357.900000
.897	24.740	-0.01170	.15420	.03710	.19130	-0.04700	-0.05340	-0.04450	-0.04420	.03300	357.900000
.900	28.640	-0.00630	.11740	.03010	.14750	-0.06100	-0.04520	-0.05810	-0.04180	.11630	357.900000
GRADIENT		-0.00002	-0.00319	-0.00903	-0.01223	.00040	.00024	.00041	.00023	.00039	.000000

RUN NO. 328/0 RN/L = 2.28 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.052	-1.637	-0.00740	.34970	.14210	.49180	-0.09030	-0.08810	-0.08420	-0.06800	.02040	409.800000
1.055	.082	-0.00680	.34360	.13160	.47520	-0.09030	-0.08740	-0.08440	-0.06640	.01350	409.800000
1.060	1.103	-0.00650	.33410	.11830	.45240	-0.08980	-0.08560	-0.08350	-0.06550	.02030	409.800000
1.060	1.609	-0.00730	.33180	.11280	.44460	-0.08960	-0.08580	-0.08330	-0.06470	.02050	409.800000
1.060	3.549	-0.00630	.32940	.09220	.42160	-0.08690	-0.08490	-0.08120	-0.06430	.02050	409.800000
1.057	5.537	-0.00520	.32030	.07050	.39080	-0.08350	-0.08230	-0.07820	-0.06250	.03210	409.800000
1.053	7.603	-0.00480	.32080	.04140	.36210	-0.08230	-0.08120	-0.07680	-0.06190	.03060	409.800000
1.052	9.571	-0.00540	.30690	.03550	.34250	-0.08410	-0.08190	-0.07770	-0.06290	.04820	409.800000
1.051	12.610	-0.00420	.26410	.02970	.29480	-0.08310	-0.08220	-0.07890	-0.06220	.07570	409.800000
1.053	15.660	-0.01250	.22340	.02970	.25920	-0.08370	-0.07900	-0.07920	-0.07110	.09450	409.800000
1.051	18.700	-0.00610	.19670	.02130	.21800	-0.07310	-0.04590	-0.07080	-0.04210	.08350	409.800000
1.051	21.710	-0.00930	.15090	.00580	.15670	-0.06470	-0.03480	-0.03320	-0.03320	.06290	409.800000
1.051	24.670	-0.02290	.10110	.01320	.11430	-0.06470	-0.03480	-0.06820	-0.05930	.04490	409.800000
1.047	28.610	-0.01610	.06390	.02070	.08460	-0.10000	-0.06340	-0.06980	-0.06840	.00970	409.800000
GRADIENT		.00020	-0.00487	-0.01183	-0.01670	.00082	.00077	.00076	.00063	.00074	.000000

ARC 11-747 0A53A B C M F W1 V LOW RN/L

(BEJ:118) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.      XMRP = 52.3010 IN.  
LREF = 14.2446 IN.      YMRP = .9000 IN.  
BREF = 28.1904 IN.      ZMRP = 11.2500 IN.  
SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA	=	.000	ELEV-W	=	-20.000
AILON	=	.000	BFLAP	=	-11.700
SPOBK	=	25.000	RUDR	=	.000
ELEV-L	=	-20.000	ELEV-R	=	-20.000

RUN NO. 327 /  $\phi$  RN/L = 2.31 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHR	CHET	CHCO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.1.203	-1.628	-0.0745	0.3296	0.0925	0.4199	-0.0905	-0.0823	-0.0842	-0.0140	0.0316	442.90000
1.1.205	0.63	-0.0765	0.3243	0.0797	0.4040	-0.0907	-0.0810	-0.0838	-0.0798	0.0474	442.90000
1.1.205	1.931	-0.0616	0.3300	0.0616	0.3931	-0.0878	-0.0798	-0.0826	-0.0789	0.0596	442.90000
1.1.204	1.594	-0.0575	0.3255	0.0530	0.3785	-0.0874	-0.0795	-0.0825	-0.0788	0.0560	442.90000
1.1.204	3.537	-0.0485	0.3178	0.0359	0.3538	-0.0864	-0.0840	-0.0810	-0.0773	0.0721	442.90000
1.1.204	5.534	-0.0143	0.2995	0.0289	0.3284	-0.0845	-0.0784	-0.0749	-0.0720	0.0747	442.90000
1.1.202	7.586	-0.0152	0.2786	0.0250	0.3036	-0.0827	-0.0772	-0.0739	-0.0709	0.0749	442.90000
1.1.196	9.579	-0.0165	0.2595	0.0259	0.2800	-0.0784	-0.0733	-0.0684	-0.0637	0.0750	442.90000
1.1.199	12.605	-0.0148	0.2210	0.0237	0.2518	-0.0553	-0.0466	-0.0452	-0.0419	0.0653	442.90000
1.1.201	15.655	-0.0745	0.1675	0.0184	0.1856	-0.0513	-0.0459	-0.0452	-0.0436	0.0484	442.90000
1.1.198	18.690	-0.0620	0.1141	0.0052	0.1193	-0.0565	-0.0512	-0.0519	-0.0496	0.0300	442.90000
1.1.198	21.690	0.0380	0.0290	-0.0488	0.0781	-0.0583	-0.0487	-0.0574	-0.0515	0.0138	442.90000
1.1.193	24.650	-0.0719	0.0493	-0.0690	0.0245	-0.0515	-0.0433	-0.0528	-0.0461	-0.0230	442.90000
1.1.193	28.650	-0.0120	0.0118	-0.0120	-0.0045	-0.0399	-0.0425	-0.0720	-0.0363	-0.0326	442.90000
GRADIENT		-0.00017	-0.00238	-0.01323	-0.01560	-0.00116	-0.00043	-0.00075	-0.00090	-0.00356	0.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOK. RN/L

(BEJ019) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREP = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AIRRON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 332/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.599	-1.681	-1.9560	.28720	-.02130	-.04070	-.02020	-.03380	.02600	481.40000
.598	-.120	-.00230	.19480	-.02140	-.04070	-.02010	-.03380	.02940	481.40000
.598	1.149	-.00240	.19490	-.02160	-.04070	-.02010	-.03380	.02610	481.40000
.598	1.646	-.00300	.19410	-.02190	-.04140	-.02030	-.03390	.02960	481.40000
.597	3.595	-.00210	.19290	-.02140	-.04150	-.02040	-.04040	.03070	481.40000
.597	5.582	-.00230	.19250	-.02150	-.04160	-.02040	-.04050	.02400	481.40000
.597	7.640	-.00260	.19110	-.02160	-.04220	-.02030	-.04080	.02050	481.40000
.599	9.624	-.00370	.18810	-.02170	-.04280	-.02010	-.04080	.02770	481.40000
.596	12.670	-.00270	.18560	-.02160	-.04260	-.02050	-.04110	.02640	481.40000
.596	15.730	-.00260	.18060	-.02160	-.04260	-.02050	-.04110	.01780	481.40000
.600	18.760	-.00340	.16110	-.02230	-.04290	-.02070	-.04100	.01200	481.40000
.596	21.770	-.00190	.14260	-.02390	-.04440	-.02260	-.04370	.00220	481.40000
.598	24.730	-.00250	.12490	-.02780	-.04880	-.02630	-.04790	-.00770	481.40000
.598	28.710	.00120	.09730	-.03530	-.05250	-.03420	-.05480	-.01980	481.40000
GRADIENT		-.00004	-.00249	-.00004	-.00021	-.00006	-.00014	.00030	.00000

RUN NO. 335/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHN	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-1.701	-.00240	.22830	-.02130	-.04340	-.01980	-.04250	.03280	641.30000
.802	.135	-.00230	.22820	-.02100	-.04320	-.01970	-.04220	.03180	641.30000
.804	1.118	-.00310	.22670	-.02100	-.04330	-.01960	-.04170	.02970	641.30000
.803	1.639	-.00240	.22280	-.02090	-.04290	-.01960	-.04180	.03490	641.30000
.802	3.565	-.00200	.21670	-.02100	-.04260	-.01970	-.04190	.03330	641.30000
.801	5.618	-.00280	.21220	-.02100	-.04290	-.01930	-.04180	.03150	641.30000
.798	7.593	-.00210	.20950	-.02060	-.04350	-.01940	-.04250	.03470	641.30000
.802	9.587	-.00190	.20720	-.02050	-.04370	-.01960	-.04260	.03430	641.30000
.801	12.620	-.00260	.20650	-.02040	-.04390	-.01940	-.04230	.03540	641.30000
.800	15.690	-.00290	.17160	-.02060	-.04420	-.01970	-.04220	.02960	641.30000
.798	18.730	-.00430	.15560	-.02370	-.04780	-.02230	-.04500	.02840	641.30000
.798	21.750	-.00720	.14650	-.02790	-.05270	-.02600	-.04730	.02080	641.30000
.797	24.740	-.01590	.12260	-.03380	-.05590	-.03210	-.04660	.01710	641.30000
.804	28.760	-.00720	.10970	-.04130	-.05940	-.04020	-.05320	.01420	641.30000
GRADIENT		.00008	-.00290	.00006	.00019	.00002	.00014	.00032	-.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(0EJ019) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1000 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 332/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.903	-1.685	-0.07750	.29710	.13850	.43560	-.03120	-.05560	-.02780	-.05150	.01900	617.90000
.902	.075	-.00660	.28990	.13360	.42350	-.02970	-.05380	-.02650	-.05040	.01940	617.90000
.902	1.103	-.00660	.28270	.12860	.41130	-.02840	-.05290	-.02540	-.04920	.01750	617.90000
.903	1.623	-.00660	.28000	.12420	.40420	-.02790	-.05260	-.02480	-.04920	.01760	617.90000
.905	3.552	-.00660	.27460	.11650	.38110	-.02710	-.05180	-.02380	-.04850	.01940	617.90000
.904	5.523	-.00597	.26690	.08560	.35260	-.02560	-.05050	-.02290	-.04740	.02180	617.90000
.903	7.612	-.00480	.26180	.06270	.32430	-.02550	-.04980	-.02310	-.04740	.02150	617.90000
.903	9.583	-.00500	.27020	.03870	.30890	-.02500	-.04850	-.02270	-.04570	.02200	617.90000
.897	12.620	-.00480	.22900	.02570	.25460	-.02410	-.04900	-.02260	-.04560	.02440	617.90000
.902	15.670	-.00600	.17430	.01950	.19380	-.02680	-.05260	-.02490	-.04850	.02530	617.90000
.902	18.740	-.00690	.16260	.01680	.17940	-.03190	-.05760	-.02980	-.05280	.02680	617.90000
.899	21.730	-.00610	.15700	.01850	.17550	-.03840	-.05920	-.03660	-.05500	.02730	617.90000
.901	24.710	-.00510	.15050	.03710	.18760	-.04550	-.05120	-.04450	-.05450	.02780	617.90000
.899	28.660	-.00630	.11510	.02780	.14290	-.06130	-.04570	-.05690	-.04580	.01840	617.90000
GRADIENT		.00016	-.00520	-.00750	-.01270	.00094	.00082	.00092	.00068	-.00001	.00000

RUN NO. 329/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.049	-1.663	-.00730	.34880	.14420	.49300	-.08940	-.08750	-.08310	-.08610	.02060	627.20000
1.049	.081	-.00640	.34270	.13800	.48070	-.08840	-.08680	-.08290	-.08580	.01900	627.20000
1.049	1.113	-.00720	.33870	.12750	.46220	-.08800	-.08670	-.08210	-.08540	.02070	627.20000
1.051	1.615	-.00780	.33500	.11430	.44920	-.08720	-.08580	-.08150	-.08430	.02170	627.20000
1.053	3.554	-.00750	.33080	.08130	.41220	-.08750	-.08400	-.07930	-.08280	.02680	627.20000
1.051	5.544	-.00710	.33470	.05430	.38900	-.08210	-.08230	-.07590	-.08140	.02830	627.20000
1.049	7.596	-.00750	.32190	.03750	.35940	-.08260	-.08120	-.07520	-.08130	.03400	627.20000
1.046	9.570	-.00250	.29710	.03020	.32720	-.08290	-.08160	-.07590	-.08380	.04180	627.20000
1.050	12.590	-.00160	.25230	.02820	.28090	-.08160	-.08350	-.08040	-.08310	.07840	627.20000
1.048	15.660	-.01410	.22680	.02690	.25570	-.08320	-.07420	-.07650	-.06670	.09660	627.20000
1.049	18.710	-.02480	.19230	.01830	.21060	-.07550	-.06120	-.06120	-.06700	.08540	627.20000
1.048	21.710	-.00460	.16870	.00530	.18620	-.07550	-.03660	-.06080	-.03360	.06360	627.20000
1.047	24.700	-.02220	.15080	.01240	.11320	-.06260	-.03660	-.05940	-.03310	.04480	627.20000
1.047	28.630	-.00420	.06480	.02140	.08620	-.08720	-.06170	-.08240	-.06030	.01450	627.20000
GRADIENT		-.00016	-.00415	-.01524	-.01937	.00083	.00081	.00098	.00081	.00166	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RN/L

(BEJ519) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YNRF = 32.3015 IN.  
 LREF = 14.2440 IN. YNRF = .00000 IN.  
 BREF = 28.1004 IN. ZNRF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 326/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHX	CHCI	CHCD	CHCT	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.204	-1.636	-0.02670	.33670	.08290	.41970	-.09040	-.08150	-.08380	-.08130	.03810	574.20000
1.205	.070	-.00660	.33160	.07420	.40580	-.08950	-.08160	-.08360	-.08080	.04540	574.20000
1.209	1.082	-.00620	.32610	.05920	.38320	-.08780	-.08040	-.08250	-.07960	.05380	574.20000
1.210	1.587	-.00680	.32740	.05140	.37870	-.08720	-.08020	-.08180	-.07880	.06250	574.20000
1.207	1.535	-.01150	.32350	.03560	.35910	-.08670	-.08070	-.08070	-.07590	.07270	574.20000
1.205	5.529	-.01410	.30550	.02840	.33390	-.08430	-.07860	-.07640	-.07240	.07480	574.20000
1.201	7.595	-.01770	.27630	.02440	.30270	-.08170	-.07530	-.07120	-.06820	.07330	574.20000
1.200	9.570	-.01850	.25890	.02400	.28300	-.07840	-.07080	-.06770	-.06310	.07340	574.20000
1.194	12.590	-.02120	.22880	.02280	.25160	-.05820	-.05000	-.04460	-.04240	.06240	574.20000
1.198	15.650	-.02650	.16980	.01790	.18770	-.05260	-.04720	-.04760	-.04560	.04830	574.20000
1.198	18.710	-.02680	.11580	.00440	.12020	-.05680	-.05280	-.05230	-.05050	.02930	574.20000
1.196	21.790	.00250	.08740	-.00470	.08270	-.05540	-.04880	-.05580	-.05090	.01460	574.20000
1.195	24.660	.00750	.04730	-.00770	.03960	-.05150	-.04040	-.05250	-.04690	-.06690	574.20000
1.195	28.650	-.01210	.00980	-.01250	-.00280	-.07960	-.04000	-.07130	-.03620	-.03310	574.20000
	GRADIENT	-.00115	-.00295	-.01153	-.01450	.00291	.00025	.00096	.00132	.00841	-.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V HIGH RN/L

(BEJ25) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. Y REF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

BETA =  
 ALLRON =  
 SPBRK =  
 ELEV-L =

.0000 ELEVON = -20.000  
 .0000 BDCLAP = -11.700  
 25.000 RUDDER = .000  
 -20.000 ELEV-R = -20.000

## PARAMETRIC DATA

RUN NO. 337/0 RN/L = 6.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-.763	-.00270	.19310	-.09130	-.04120	-.01360	-.03970	.02220	781.80000
.598	-.117	-.00210	.19360	-.08910	-.04120	-.01380	-.04010	.02500	781.80000
.599	1.146	-.00290	.19370	-.08670	-.04160	-.01350	-.04000	.02170	781.80000
.599	1.632	-.00280	.19260	-.08430	-.04150	-.01350	-.04000	.02120	781.80000
.598	3.611	-.00260	.19120	-.08100	-.04160	-.01360	-.04000	.02380	781.80000
.597	5.637	-.00330	.19070	-.07730	-.04280	-.01370	-.04000	.02420	781.80000
.598	7.649	-.00320	.18780	-.07100	-.04270	-.01370	-.04000	.02430	781.80000
.597	9.633	-.00370	.18680	-.06390	-.04330	-.01370	-.04000	.02420	781.80000
.595	12.640	-.00310	.18590	-.05140	-.04320	-.01380	-.04000	.02410	781.80000
.597	15.710	-.00320	.17790	-.04080	-.04350	-.01390	-.04000	.02410	781.80000
.597	18.760	-.00340	.17280	-.02830	-.04410	-.01360	-.04000	.02410	781.80000
.596	21.770	-.00230	.13810	-.02120	-.04520	-.01200	-.04360	.02000	781.80000
.597	24.760	-.00300	.12460	-.01530	-.04850	-.01250	-.04710	-.01130	781.80000
.599	28.740	-.00290	.10510	-.02450	-.05340	-.01310	-.05170	-.02120	781.80000
GRADIENT		-.00004	-.00049	-.00233	-.00284	-.00002	-.00009	.00005	.00000

RUN NO. 336/0 RN/L = 5.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.798	-.739	-.00300	.22690	-.10290	-.04390	-.01940	-.04230	.02960	829.90000
.799	.133	-.00290	.22480	-.10080	-.04380	-.01950	-.04210	.03150	829.90000
.801	1.134	-.00310	.22250	-.09620	-.04390	-.01960	-.04210	.03040	829.90000
.802	1.634	-.00300	.22180	-.09480	-.04400	-.01960	-.04220	.03470	829.90000
.800	3.611	-.00280	.21560	-.08390	-.04350	-.01970	-.04230	.03220	829.90000
.798	5.576	-.00230	.21170	-.08130	-.04350	-.01970	-.04210	.03310	829.90000
.798	7.624	-.00250	.20870	-.07120	-.04360	-.01970	-.04220	.03640	829.90000
.798	9.634	-.00310	.20740	-.05610	-.04450	-.01960	-.04240	.03180	829.90000
.801	12.610	-.00330	.20660	-.03680	-.04460	-.01970	-.04250	.03330	829.90000
.799	15.700	-.00230	.18030	-.02130	-.04510	-.01920	-.04340	.03020	829.90000
.800	18.730	-.00180	.15810	-.01760	-.04780	-.012210	-.04500	.02370	829.90000
.799	21.770	-.00450	.15010	-.02550	-.04780	-.01260	-.04820	.01690	829.90000
.799	24.770	-.00330	.14440	-.03330	-.05570	-.01220	-.04740	.01710	829.90000
.798	28.690	-.01030	.11250	-.04060	-.06180	-.01430	-.05180	.01300	829.90000
GRADIENT		-.00004	-.00027	-.00006	-.00006	-.00004	-.00001	.00003	.00000

DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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(BEJ020) (12 MAR 74)

## REFERENCE DATA

SCRF = 2.4210 SJ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRFF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEV-N = -20.0000  
 AIRLOW = .0000 BDFLAP = -11.7000  
 SPDBRK = 25.0000 RUDDER = .0000  
 ELEV-L = -20.0000 ELEV-R = -20.0000

RUN NO. 331/ 0 RN/L = 4.77 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CH <sub>R</sub>	CH <sub>EI</sub>	CH <sub>EO</sub>	CH <sub>ET</sub>	CH <sub>LL</sub>	CH <sub>UL</sub>	CH <sub>LR</sub>	CH <sub>LF</sub>	Q
.904	-7.709	-.00620	.29440	.13460	.42930	-.03000	-.05400	-.05100	.01790	791.60000
.906	-.091	-.00680	.29250	.13150	.42450	-.02930	-.05380	-.05100	.01710	791.60000
.906	1.097	-.00640	.28750	.12630	.41380	-.02830	-.05310	-.04990	.01710	791.60000
.906	1.621	-.00730	.28700	.12430	.41120	-.02840	-.05350	-.04960	.02190	791.60000
.906	3.567	-.00680	.27780	.10940	.38720	-.02700	-.05240	-.04650	.02190	791.60000
.903	5.529	-.00410	.26650	.08410	.35160	-.02520	-.05190	-.04600	.02190	791.60000
.903	7.509	-.00440	.27050	.05820	.32870	-.02540	-.04970	-.04670	.01810	791.60000
.906	9.581	-.00480	.27010	.04580	.31590	-.02470	-.04950	-.04640	.01990	791.60000
.904	12.610	-.00540	.23420	.02540	.25960	-.02500	-.05060	-.04640	.02140	791.60000
.906	15.690	-.00570	.18020	.02050	.20270	-.02740	-.05350	-.04990	.02320	791.60000
.902	18.710	-.00590	.17030	.01730	.18760	-.03110	-.05750	-.05350	.02640	791.60000
.904	21.740	-.00600	.15560	.02630	.16260	-.04040	-.06110	-.05680	.03130	791.50000
.904	24.730	-.00770	.15860	.03870	.13720	-.04840	-.05110	-.05480	.02620	791.60000
.903	28.650	-.00710	.11430	.02760	.14190	-.05980	-.04800	-.05600	.02590	791.60000
GRADIENT		-.00013	-.00393	-.00590	-.00983	.00268	.00037	.00055	.00118	.00000

RUN NO. 330/ 0 RN/L = 4.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CH <sub>R</sub>	CH <sub>EI</sub>	CH <sub>EO</sub>	CH <sub>ET</sub>	CH <sub>LL</sub>	CH <sub>UL</sub>	CH <sub>LR</sub>	CH <sub>LF</sub>	Q
1.053	-.653	-.00780	.35470	.14020	.43490	-.06930	-.08740	-.08580	.02070	809.90000
1.052	.078	-.00740	.34660	.13400	.48060	-.06820	-.08690	-.08540	.02200	809.90000
1.052	1.108	-.00750	.34110	.11500	.45610	-.06750	-.08590	-.08430	.02240	809.90000
1.051	1.625	-.00780	.34010	.10810	.44820	-.06720	-.08570	-.08400	.02350	809.90000
1.050	3.556	-.00710	.34650	.07060	.41710	-.06500	-.08400	-.08270	.03000	809.90000
1.051	5.549	-.00630	.34780	.04960	.39740	-.06280	-.08270	-.08110	.03070	809.90000
1.050	7.590	-.00580	.33160	.03460	.36620	-.06270	-.08130	-.08220	.03070	809.90000
1.050	9.573	-.00290	.30590	.02910	.33500	-.06430	-.08290	-.08510	.03420	809.90000
1.049	12.590	-.00040	.25760	.02840	.28600	-.06360	-.08360	-.08390	.03210	809.90000
1.050	15.660	-.01830	.22510	.02620	.25100	-.06360	-.07630	-.08560	.03780	809.90000
1.052	18.720	-.03330	.18750	.01640	.21400	-.05590	-.05560	-.03770	.03660	809.90000
1.052	21.720	-.01440	.14640	.00440	.15080	-.06990	-.03720	-.03470	.03530	809.90000
1.048	24.730	-.01490	.09960	.01150	.11100	-.03870	-.07370	-.06290	.04420	809.90000
1.048	28.680	-.00700	.06260	.02100	.08360	-.08880	-.06390	-.06260	.01240	809.90000
GRADIENT		-.00012	-.00170	-.01689	-.01859	.00097	.00081	.00076	.00215	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V HIGH RN/L

(08J020) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1034 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -20.000  
 ALLRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -20.000 ELEV-R = -20.000

RUN NO. 325/0 RN/L = 4.26 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CMR	CMEI	CMEC	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.200	-1.667	-0.0620	.34470	.08530	.43000	-0.08950	-0.08220	-0.08260	-0.08190	.04930	815.60000
1.203	-1.40	-0.0660	.34130	.07390	.41430	-0.08790	-0.08200	-0.08230	-0.08100	.05220	815.60000
1.205	1.081	-0.0690	.33820	.05960	.39590	-0.08630	-0.08100	-0.08160	-0.07960	.05940	815.60000
1.207	1.592	-0.0710	.33420	.05140	.38320	-0.08630	-0.08090	-0.08150	-0.07900	.06420	815.60000
1.206	3.544	-0.0110	.33310	.04270	.36580	-0.08490	-0.08060	-0.07880	-0.07500	.07140	815.60000
1.200	5.551	-0.0130	.32130	.02220	.34240	-0.08410	-0.07900	-0.07690	-0.07260	.07560	815.60000
1.199	7.583	-0.0190	.29030	.01930	.30940	-0.08130	-0.07590	-0.06970	-0.06560	.07810	815.60000
1.198	9.584	-0.0220	.26700	.02140	.28840	-0.07650	-0.06950	-0.06330	-0.06010	.07290	815.60000
1.194	12.590	-0.0260	.22250	.02120	.24370	-0.05960	-0.05140	-0.04340	-0.04170	.06280	815.60000
1.200	15.650	-0.0310	.17030	.01550	.18580	-0.05410	-0.04970	-0.04930	-0.04740	.04570	815.60000
1.198	16.670	-0.0370	.11460	.00290	.11740	-0.05880	-0.05470	-0.05360	-0.05190	.02750	815.60000
1.191	21.560	.01440	.05790	-0.00470	.08320	-0.05500	-0.04390	-0.05700	-0.05230	.01340	815.60000
1.199	24.670	.01670	.04640	-0.00760	.05960	-0.05250	-0.04220	-0.05300	-0.04770	-0.00930	815.60000
1.196	26.0	.01820	.01820	-0.01230	-0.00410	-0.07870	-0.04200	-0.06730	-0.03490	-0.03360	815.60000
						.08087	.00036	.00091	.00163	.00547	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ021) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3515 IN.  
 LREF = 14.2445 IN. YMRP = .0055 IN.  
 BREF = 28.1054 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AILRON = 10.000 BDFLAP = -11.700  
 SPOBRK 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

RUN NO. 124/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHCO	CHUL	CHLL	CHLR	CHLF	Q
.600	-.637	-.00110	.19850	.09190	-.01650	-.04870	-.01610	-.04790	.00860
.598	.378	-.00170	.19830	.08980	-.01650	-.04930	-.01570	-.04830	.00850
.600	1.345	-.00270	.19790	.08770	-.01710	-.04970	-.01600	-.04810	.00810
.601	1.841	-.00110	.19690	.08620	-.01610	-.04990	-.01550	-.04780	.00820
.599	3.794	-.00170	.19540	.08310	-.01630	-.04900	-.01550	-.04810	.00880
.598	5.809	-.00180	.19220	.07890	-.01630	-.04930	-.01560	-.04830	.00920
.598	7.858	-.00050	.19030	.07410	-.01570	-.04910	-.01560	-.04880	.00860
.599	9.840	.00070	.18550	.06700	-.01510	-.04850	-.01550	-.04800	.00790
.600	12.890	.00050	.18400	.05150	-.01600	-.04770	-.01550	-.04870	.00380
.599	15.960	.00100	.17710	.03440	-.01630	-.04770	-.01590	-.04910	.00510
.597	19.070	.00110	.15460	.02480	-.01750	-.04840	-.01710	-.04990	.00630
.598	22.030	.00280	.14100	.02190	-.01780	-.05040	-.01880	-.05220	.00820
.597	25.070	.00410	.11610	.02200	-.02120	-.05340	-.02210	-.05660	.00920
.597	28.960	.00250	.10510	.02780	-.03250	-.06440	-.03130	-.06310	.00910
GRADIENT		-.00008	-.00073	-.00199	.00006	-.00002	.00010	-.00001	.00003

RUN NO. 123/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHCO	CHUL	CHLL	CHLR	CHLF	Q
.797	-.715	-.00230	.22690	.10240	-.01760	-.04780	-.01660	-.04660	.01560
.798	.398	-.00290	.22510	.10010	-.01780	-.04840	-.01640	-.04690	.01620
.798	1.419	-.00290	.22160	.09690	-.01740	-.04820	-.01630	-.04650	.01570
.798	1.921	-.00260	.21880	.09460	-.01720	-.04790	-.01620	-.04630	.01570
.798	3.920	-.00270	.21630	.08990	-.01730	-.04790	-.01630	-.04620	.01720
.793	5.881	-.00190	.21440	.08360	-.01790	-.04790	-.01630	-.04670	.01810
.797	7.927	-.00190	.20830	.07070	-.01710	-.04760	-.01620	-.04670	.02070
.797	9.909	-.00130	.20460	.04840	-.01660	-.04810	-.01630	-.04710	.01960
.797	12.950	-.00180	.20150	.03180	-.01720	-.04870	-.01690	-.04760	.01850
.799	16.000	-.00200	.16760	.01980	-.01880	-.05060	-.01800	-.04950	.01030
.796	19.080	-.00150	.14790	.01760	-.02120	-.05410	-.02100	-.05280	.01060
.797	22.160	-.00390	.13970	.02880	-.02340	-.05860	-.02390	-.05420	.01270
.796	25.270	-.01180	.14090	.03530	-.03130	-.06690	-.03060	-.05580	.00480
.797	29.290	-.00610	.11960	.03240	-.03660	-.07030	-.03840	-.06240	.01640
GRADIENT		-.00005	-.00245	-.00280	.00010	.00002	.00007	.00012	.00000

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ021) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .00000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -10.000  
 AIRLON = 10.000 BDFAP = -11.700  
 SPDBK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = -20.000

RUN NO. 122 / 0 RN/L = 3.74 GRADIENT INTERVAL = -5.000 / 5.000

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUL	CHUR	CHLR	CHRF	Q
.901	-1.705	-0.04400	.27830	.13490	.41310	-.02410	-.05550	-.02220	-.05530	-.05340	.02630	615.50000
.900	.394	-.02450	.28100	.13100	.41190	-.02390	-.05570	-.02150	-.05360	-.05360	.02450	615.50000
.903	1.433	-.00380	.27380	.12580	.40560	-.02320	-.05550	-.02140	-.05340	-.05340	.02270	615.50000
.900	1.932	-.00330	.27460	.12100	.39570	-.02260	-.05510	-.02090	-.05310	-.05310	.02200	615.50000
.900	3.876	-.00350	.26240	.10840	.36320	-.02190	-.05410	-.02010	-.05240	-.05240	.03000	615.50000
.897	5.851	-.00290	.25050	.07890	.32890	-.02180	-.05280	-.01960	-.05120	-.05120	.03120	615.50000
.898	7.887	-.00300	.25090	.05610	.30700	-.02150	-.05190	-.02010	-.05030	-.05030	.03240	615.50000
.900	9.854	-.00270	.26280	.03350	.29640	-.02110	-.05130	-.01980	-.04990	-.04990	.03280	615.50000
.897	12.860	-.00340	.22530	.02690	.25220	-.02180	-.05270	-.01990	-.05120	-.05120	.03460	615.50000
.898	15.920	-.00410	.17430	.02470	.20290	-.02400	-.05550	-.02190	-.05550	-.05550	.02510	615.50000
.898	19.000	-.00560	.11520	.01750	.17270	-.02610	-.06410	-.02620	-.06120	-.06120	.02400	615.50000
.899	22.110	-.00640	.15370	.03300	.14670	-.03400	-.06920	-.03260	-.06820	-.06820	.02770	615.50000
.897	25.220	-.01300	.15310	.04030	.19340	-.04760	-.06640	-.04330	-.06770	-.06770	.06420	615.50000
.901	29.250	-.02830	.11200	.03150	.14960	-.05740	-.06430	-.05430	-.05500	-.05500	.08120	615.50000
GRADIENT		.00018	-.00373	-.00751	-.01121	.00052	.00023	.00045	.00066	.00066		

RUN NO. 121 / 0 RN/L = 3.50 GRADIENT INTERVAL = -5.000 / 5.000

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUL	CHUR	CHLR	CHRF	Q
1.050	-1.684	.01370	.35460	.14430	.49890	-.06120	-.07080	-.05620	-.06350	-.06350	.02760	627.30000
1.052	.364	.01320	.34680	.13200	.47880	-.06110	-.07010	-.05720	-.06230	-.06230	.03050	627.30000
1.051	1.473	.01740	.34000	.11550	.45550	-.05860	-.06560	-.05490	-.06070	-.06070	.03310	627.30000
1.50	1.871	.01620	.33880	.10810	.44590	-.05810	-.06530	-.05370	-.06130	-.06130	.03170	627.30000
1.051	3.784	.01370	.33360	.09300	.41940	-.05600	-.06320	-.05140	-.05740	-.05740	.03740	627.30000
1.045	5.742	.01560	.33270	.05620	.38890	-.05420	-.06870	-.05570	-.05760	-.05760	.04520	627.30000
1.046	7.766	.01370	.31900	.03650	.35750	-.04950	-.06390	-.05320	-.05720	-.05720	.06140	627.30000
1.047	9.748	.02130	.29640	.03140	.32780	-.04690	-.06150	-.05460	-.05720	-.05720	.06170	627.30000
1.045	12.780	.02690	.25120	.02840	.27370	-.04710	-.06000	-.05520	-.05750	-.05750	.06420	627.30000
1.046	15.830	.04260	.22510	.02660	.25260	-.02770	-.05860	-.05740	-.05740	-.05740	.06430	627.30000
1.045	18.870	.02270	.18900	.01690	.20600	-.02430	-.05420	-.05470	-.05420	-.05420	.05000	627.30000
1.050	21.900	.03260	.14750	.00710	.15460	-.02250	-.04220	-.05510	-.04210	-.04210	.05630	627.30000
1.048	24.970	.01720	.10260	.01460	.11720	-.01720	-.03500	-.07250	-.04620	-.04620	.06190	627.30000
1.048	29.000	.02690	.05430	.01900	.07340	-.05710	-.05590	-.07610	-.05620	-.05620	.06120	627.30000
GRADIENT		-.00143	-.00465	-.01340	-.01805	.00118	.00033	.00173	.00122	.00122		



ARC 11-747 QAS3A B C H F W V NOM. RN/L

(BEJ021) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = -10.000  
 ALLRON = 10.000 BDFLAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = .0000 ELEV-R = -20.000

RUN NO. 120/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHEI	CHEO	CHET	CHUL	CHUR	CHLL	CHUR	CHLR	CHBF	Q
1.199	-0.677	.03190	.33910	.08670	.42580	-.06010	-.06920	-.08220	-.06920	-.08500	.05570	566.90000
1.201	.263	.03470	.33120	.07540	.40670	-.05770	-.06080	-.06080	-.06830	-.08490	.05830	566.90000
1.199	1.271	.03800	.32850	.06100	.38950	-.05470	-.05950	-.05950	-.06730	-.08490	.05890	566.90000
1.198	1.775	.03920	.32950	.05470	.38420	-.05340	-.05870	-.05870	-.06690	-.08430	.06000	566.90000
1.199	3.673	.04120	.32640	.03680	.36320	-.04920	-.05870	-.05870	-.06360	-.08350	.08060	566.90000
1.194	5.653	.03950	.30930	.02980	.33910	-.04600	-.05910	-.05910	-.06340	-.08130	.05840	566.90000
1.198	7.701	.03180	.27720	.02610	.30330	-.04410	-.05940	-.05940	-.05970	-.07650	.05450	566.90000
1.196	9.670	.02710	.25960	.02510	.28480	-.04340	-.05940	-.05940	-.05670	-.07320	.04900	566.90000
1.196	12.700	-.00410	.22860	.02320	.25180	-.04680	-.05760	-.05760	-.04290	-.05740	.03820	566.90000
1.196	15.730	-.02640	.18950	.01880	.18830	-.05020	-.04480	-.04480	-.05930	-.05840	.02230	566.90000
1.197	18.760	-.00590	.11860	.00570	.12420	-.05380	-.06130	-.06130	-.04810	-.06010	.00890	566.90000
1.196	21.810	.00600	.08190	-.00480	.07710	-.05070	-.05830	-.05830	-.05200	-.06300	-.00540	566.90000
1.197	24.810	.00600	.05200	-.00700	.04500	-.04720	-.04940	-.04940	-.04700	-.05570	-.02440	566.90000
1.198	28.840	-.01140	.01190	-.01230	-.02040	-.06650	-.06390	-.06390	-.04130	-.04130	-.04350	566.90000
	GRADIENT	.00216	-.00257	-.01161	-.01419	.00253	.00083	.00082	.00083	.00036	.00106	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

PAGE 322

ARC 11-747 QAS3A B C M F M V NOM. RN/L

(BEJ022) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA =  
 AIRLON =  
 SPDBRK =  
 ELEV-L =

.0000 ELEVON = -20.0000  
 20.0000 BDFLAP = -11.7000  
 25.0000 RUDDER = .0000  
 .0000 ELEV-R = -40.0000

## PARAMETRIC DATA

RUN NO. 134/0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-.726	.00090	.30650	.12670	.43320	-.01660	-.04480	-.01940	-.04290	.00860	475.90000
.601	.314	.00130	.30280	.12640	.42720	-.01590	-.04470	-.01910	-.04280	.00820	475.90000
.603	1.338	.00130	.29390	.12350	.41740	-.01650	-.04420	-.01910	-.04290	.00930	475.90000
.598	1.838	.00140	.29260	.12310	.41570	-.01660	-.04440	-.01920	-.04320	.01000	475.90000
.597	3.779	.00270	.28590	.11690	.40280	-.01570	-.04380	-.01910	-.04320	.00940	475.90000
.598	5.815	.00330	.27780	.11050	.38830	-.01610	-.04370	-.01880	-.04420	.00930	475.90000
.598	7.857	.00390	.27680	.10270	.37950	-.01590	-.04380	-.01900	-.04460	.01080	475.90000
.605	9.842	.00550	.27220	.09410	.36630	-.01570	-.04290	-.01920	-.04490	.00860	475.90000
.605	12.890	.00620	.27050	.07670	.34720	-.01580	-.04250	-.01920	-.04510	.00460	475.90000
.597	15.930	.00540	.27190	.05490	.32670	-.01580	-.04260	-.01920	-.04460	-.00300	475.90000
.596	19.010	.00280	.26310	.03800	.30100	-.01740	-.04560	-.02000	-.04490	-.02000	475.90000
.600	22.020	.00230	.24520	.02440	.26560	-.01910	-.04560	-.02160	-.04540	-.02640	475.90000
.596	25.020	.00100	.21730	.01750	.23480	-.02300	-.05000	-.02500	-.04900	-.02730	475.90000
.597	28.990	-.00120	.12650	.01100	.13750	-.03380	-.06050	-.03380	-.05930	-.03630	475.90000
GRADIENT		.00238	-.00460	-.00225	-.05685	.00013	.00023	.00005	-.00009	.00027	.00000

RUN NO. 133/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.780	-.742	.00110	.33930	.13510	.47440	-.01730	-.04430	-.01950	-.04320	.01970	640.20000
.798	.412	.00140	.33230	.13410	.46640	-.01670	-.04470	-.01940	-.04330	.01980	640.20000
.798	1.436	.00150	.32580	.13190	.45770	-.01690	-.04440	-.01950	-.04330	.02020	640.20000
.799	1.926	.00140	.32110	.12970	.45080	-.01720	-.04380	-.01940	-.04300	.02070	640.20000
.798	3.887	.00200	.31290	.11890	.43190	-.01670	-.04400	-.01950	-.04310	.02210	640.20000
.799	5.898	.00350	.30680	.11040	.41720	-.01690	-.04350	-.01970	-.04420	.02410	640.20000
.798	7.948	.00550	.30280	.10560	.40840	-.01670	-.04330	-.02010	-.04540	.02340	640.20000
.797	9.935	.00580	.29680	.08140	.37820	-.01660	-.04320	-.01990	-.04570	.02420	640.20000
.796	12.960	.00420	.30000	.04850	.34850	-.01670	-.04370	-.01960	-.04510	.02080	640.20000
.798	16.010	.00070	.27750	.02230	.29980	-.01790	-.04570	-.02000	-.04430	.01450	640.20000
.797	19.070	-.00250	.24210	.01670	.25880	-.02110	-.05100	-.02230	-.04730	.01180	640.20000
.797	22.140	-.00480	.18890	.00880	.19770	-.02420	-.05570	-.02590	-.04930	.00860	640.20000
.796	25.240	-.01100	.15870	.01310	.17180	-.03440	-.06270	-.03370	-.05200	.00520	640.20000
.798	29.190	-.01000	.10970	.00850	.11820	-.03970	-.06790	-.03970	-.05800	.00290	640.20000
GRADIENT		.00018	-.00581	-.00355	-.00934	.00008	.00012	-.00000	-.00004	.00054	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QM33A

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ARC 11-747 QM33A B C H F M V NOM. RN/L

(BEJ022) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = 100 ELEVON = -20.000  
 AIRLON = 20.000 BDELAP = -11.700  
 SPBRK = 25.000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = -40.000

RUN NO. 132/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.901	-7.746	.00030	.36860	.15650	.52510	-.02700	-.05250	-.02720	-.05270	.03350	615.00000
.902	.413	.00030	.36160	.15470	.51630	-.02620	-.05270	-.02660	-.05260	.03490	615.00000
.901	1.425	.00030	.35370	.14910	.50270	-.02470	-.05200	-.02550	-.05120	.03550	615.00000
.901	1.923	.00030	.35240	.14450	.49690	-.02380	-.05100	-.02480	-.05080	.03530	615.00000
.902	3.880	.00020	.34790	.13370	.48150	-.02320	-.05070	-.02420	-.05160	.03660	615.00000
.903	5.876	.000570	.33200	.12420	.45630	-.02200	-.04710	-.02480	-.05160	.03440	615.00000
.901	7.887	.00630	.33870	.08240	.42110	-.02200	-.04710	-.02510	-.05030	.03330	615.00000
.900	9.861	.00580	.33660	.05400	.39060	-.02030	-.04710	-.02280	-.05050	.03260	615.00000
.897	12.870	.00260	.32170	.03060	.35230	-.02050	-.04840	-.02180	-.04970	.04090	615.00000
.901	15.930	-.00310	.26930	.01710	.28620	-.02230	-.05370	-.02250	-.05040	.04490	615.00000
.902	19.000	-.00420	.20130	.00820	.20950	-.02700	-.06140	-.02760	-.05650	.07190	615.00000
.899	22.070	-.00780	.14870	.00160	.15030	-.03670	-.06690	-.03680	-.05900	.09600	615.00000
.899	25.200	-.01370	.13840	.00980	.14820	-.05070	-.06320	-.04730	-.05280	.08280	615.00000
.898	29.170	-.00760	.07370	.00480	.07850	-.06150	-.05690	-.05930	-.05150	.07040	615.00000
GRADIENT		.00038	-.00454	-.00518	-.00974	.00088	.00046	.00069	.00031	.00062	-.00000

RUN NO. 131/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.050	-7.701	.02820	.42090	.20250	.62140	-.05850	-.06800	-.07050	-.08410	.05720	627.00000
1.051	.391	.02800	.40060	.19910	.59970	-.05710	-.06750	-.06930	-.08330	.06150	627.00000
1.051	1.410	.02670	.39500	.19130	.58620	-.05620	-.06700	-.06740	-.08240	.06300	627.00000
1.052	1.920	.02750	.39540	.18560	.58100	-.05480	-.06640	-.06690	-.08180	.06400	627.00000
1.051	3.821	.02550	.38960	.16210	.55170	-.05240	-.06620	-.06420	-.07990	.06820	627.00000
1.049	5.785	.02170	.43580	.09830	.53410	-.05050	-.06550	-.06050	-.07710	.07240	627.00000
1.050	7.817	.02070	.41770	.07160	.48930	-.04840	-.06430	-.05760	-.07580	.07630	627.00000
1.049	9.778	.01890	.39520	.05260	.44780	-.04760	-.06320	-.05600	-.07370	.07900	627.00000
1.052	12.790	.00330	.35840	.03560	.39400	-.05470	-.06780	-.05570	-.07010	.07520	627.00000
1.051	15.860	.01670	.32620	.02990	.35610	-.04070	-.06720	-.05000	-.06450	.06500	627.00000
1.050	18.870	.05060	.25110	.02010	.27130	-.03030	-.04760	-.05640	-.07220	.05690	627.00000
1.051	21.890	.07990	.19370	.01390	.20760	-.02350	-.04560	-.05640	-.06490	.03590	627.00000
1.053	24.960	.02240	.15940	.01090	.17020	-.06660	-.04380	-.06990	-.06890	.01600	627.00000
1.051	29.050	.01610	.08910	.02190	.11100	-.07560	-.05610	-.07780	-.07000	-.01580	627.00000
GRADIENT		-.00060	-.00624	-.00879	-.01503	.00136	.00042	.00142	.00094	.00232	-.00001

ARC 11-747 0A53A B C M F W1 V NCM. RN/L

( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT.    YWRF = 32.3515 IN.  
 LREF = 14.2445 IN.    YLRF = .0000 IN.  
 BREF = 28.1034 IN.    YBRF = 11.2500 IN.  
 SCALE = .0350 SCALE

## PARAMETRIC DATA

```

BETA      = .0000      ELEVON = -20.0000
AILRON    = 20.0000    BCLAP  = -11.7000
SPDBRK    = 25.0000    RUBBER = .0000
ELEV-L    = .0000      ELEV-R = -40.0000

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RUN NO. 135 / Q RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CHR	CHET	CHFO	CHLL	CHUR	CHLR	CHCF	Q
1.203	-7.754	.03210	.34630	.19280	.53910	-.06080	-.06210	-.07100	.573.800000
1.201	.302	.03510	.33010	.18620	.51840	-.05910	-.06140	-.07080	.573.800000
1.199	1.301	.03620	.33690	.15980	.49670	-.05710	-.06140	-.06980	.573.800000
1.198	1.819	.03700	.41690	.11440	.53130	-.05700	-.06050	-.06950	.573.800000
1.200	.373	.03810	.44890	.07430	.52320	-.05520	-.05990	-.06880	.573.800000
1.198	5.694	.03650	.43010	.06160	.49180	-.05300	-.05990	-.06700	.573.800000
1.196	7.714	.03450	.40440	.04370	.44810	-.05200	-.06020	-.06130	.573.800000
1.198	9.702	.03480	.35990	.03380	.39360	-.05120	-.05910	-.06380	.573.800000
1.197	12.720	.03580	.31510	.03060	.34570	-.05020	-.05630	-.06290	.573.800000
1.198	15.760	.04020	.26910	.01910	.28820	-.04960	-.05560	-.06230	.573.800000
1.198	18.770	.03960	.20440	.01190	.21630	-.04450	-.05810	-.06370	.573.800000
1.196	21.820	.02930	.15310	.00780	.16100	-.04070	-.05440	-.06290	.573.800000
1.198	24.830	.04820	.13930	.00360	.14290	-.03270	-.04390	-.05530	.573.800000
1.197	28.850	.06080	.08790	.00160	.08790	-.06540	-.04550	-.07620	.573.800000
GRADIENT	.00128		.02713	-.02940	-.00187	.00125	-.00046	-.00009	-.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F M V NOM. RN/L

(BEJ023) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEWON = -40.000  
 AIRLON = .0000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -40.000 ELEV-R = -40.000

RUN NO. 129/0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.596	-.048	-.00510	.30630	.12770	.43490	-.03750	-.04750	-.03480	-.04490	.02320	475.40000
.598	.380	-.00630	.30630	.12760	.43390	-.03750	-.04770	-.03490	-.04460	.02340	475.40000
.599	1.407	-.00470	.30120	.12610	.42750	-.03720	-.04730	-.03420	-.04550	.02330	475.40000
.600	1.912	-.00370	.29750	.12460	.42210	-.03730	-.04740	-.03410	-.04490	.02400	475.40000
.602	3.865	-.00550	.28820	.11690	.40510	-.03710	-.04740	-.03440	-.04460	.02450	475.40000
.598	5.871	-.00500	.28310	.11220	.39530	-.03730	-.04770	-.03460	-.04530	.02210	475.40000
.598	7.920	-.00390	.28110	.10480	.38590	-.03710	-.04730	-.03480	-.04570	.02430	475.40000
.598	9.924	-.00420	.27960	.09760	.37720	-.03740	-.04800	-.03480	-.04650	.02220	475.40000
.600	12.970	-.00410	.27550	.08750	.35590	-.03710	-.04730	-.03470	-.04560	.01990	475.40000
.596	16.040	-.00570	.27780	.05820	.33630	-.03830	-.04830	-.03490	-.04560	.01730	475.40000
.598	19.080	-.00520	.26690	.04250	.30890	-.03780	-.04820	-.03480	-.04590	.01510	475.40000
.599	22.110	-.00630	.24040	.02550	.26590	-.03950	-.05010	-.03640	-.04690	.00980	475.40000
.597	25.090	-.00620	.22550	.01500	.24050	-.04230	-.05260	-.03890	-.04970	-.02090	475.40000
.601	29.030	-.00620	.11090	.00760	.11850	-.05000	-.05960	-.04570	-.05770	-.02170	475.40000
GRADIENT		.00201	-.00487	-.00281	-.00768	.00211	.00002	.00006	.00205	.00034	.00001

RUN NO. 129/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.797	-.089	-.00630	.34660	.13930	.48590	-.03650	-.05020	-.03360	-.04670	.03140	637.70000
.800	.539	-.00590	.34190	.13850	.48040	-.03660	-.04960	-.03370	-.04660	.03180	637.70000
.798	1.559	-.00580	.33570	.13670	.47180	-.03670	-.04960	-.03360	-.04690	.03170	637.70000
.798	2.050	-.00580	.33210	.13410	.46620	-.03690	-.04950	-.03320	-.04660	.03100	637.70000
.799	3.991	-.00550	.32450	.12320	.44770	-.03630	-.04900	-.03350	-.04650	.03250	637.70000
.798	6.022	-.00540	.32020	.11460	.43480	-.03640	-.04980	-.03350	-.04740	.03320	637.70000
.799	8.056	-.00480	.31410	.10840	.42250	-.03650	-.04990	-.03370	-.04770	.03420	637.70000
.800	10.050	-.00450	.30930	.08740	.39680	-.03700	-.05030	-.03370	-.04840	.03650	637.70000
.799	13.050	-.00510	.30990	.05370	.36360	-.03590	-.05050	-.03350	-.04790	.03660	637.70000
.799	16.100	-.00480	.28750	.02200	.31250	-.03580	-.04970	-.03350	-.04710	.04360	637.70000
.797	19.120	-.00630	.24620	.01610	.26230	-.03700	-.05140	-.03470	-.04740	.03860	637.70000
.799	22.160	-.00590	.19860	.00990	.20860	-.04120	-.05810	-.03870	-.05150	.02570	637.70000
.800	25.290	-.01290	.15430	.01250	.16680	-.04680	-.06300	-.04430	-.05250	.03000	637.70000
.800	29.270	-.00830	.10240	.00720	.10960	-.05330	-.06450	-.05110	-.05890	.03800	637.70000
GRADIENT		.00017	-.00540	-.00400	-.00940	.00008	.00025	.00010	.00004	.00020	.00000

ARC 11-747 CASSA B C M F W2 V NOM. RN/L

08EJ023) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    DWFP = 32.3010 IN.  
 LREF = 14.2440 IN.    YREF = .0000 IN.  
 GREF = 28.1004 IN.    ZWFP = 11.2500 IN.  
 SCALE = .0300 SCALE

### PARAMETRIC DATA

BETA	=	.000	ELEVON	=	-40.000
AILIRON	=	.000	BDFLAP	=	-11.700
SFDBRK	=	25.000	RUDDER	=	.000
ELEV-L	=	-40.000	ELEV-R	=	-40.000

RUN NO. 127/5 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CHR	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8	CH9	CH10	CH11	CH12	CH13	CH14	CH15	CH16	CH17	CH18	CH19	CH20
.901	-.825	-.00930	.37970	.37970	.16310	.54290	-.05180	-.06380	-.04620	-.06120	.01920	614.90000										
.902	.505	-.00970	.37210	.37210	.16370	.53770	-.05130	-.06340	-.05940	-.05340	.01950	614.90000										
.904	1.510	-.00800	.36600	.36600	.15960	.52560	-.04990	-.06290	-.04530	-.05950	.01820	614.90000										
.902	2.016	-.00960	.36270	.36270	.15370	.51650	-.04850	-.06250	-.04340	-.05810	.01870	614.90000										
.899	3.939	-.00880	.35740	.35740	.14020	.49740	-.04630	-.06160	-.04140	-.05780	.01820	614.90000										
.901	5.974	-.00880	.35370	.35370	.13230	.48600	-.04490	-.06070	-.03990	-.05770	.01820	614.90000										
.901	7.996	-.00780	.35570	.35570	.09690	.45250	-.04220	-.05840	-.03750	-.05520	.02160	614.90000										
.901	9.940	-.00810	.35130	.35130	.06700	.41830	-.03770	-.05770	-.03380	-.05350	.02800	614.90000										
.897	12.950	-.00770	.33730	.33730	.03720	.37450	-.03790	-.05830	-.03430	-.05420	.02370	614.90000										
.899	15.970	-.00650	.27820	.27820	.01840	.29660	-.03960	-.05870	-.03640	-.05420	.02960	614.90000										
.901	19.020	-.00820	.20630	.20630	.00840	.21460	-.04290	-.06330	-.03990	-.05840	.03840	614.90000										
.899	22.080	-.01070	.14560	.14560	.00320	.14880	-.05050	-.06650	-.04790	-.05940	.08820	614.90000										
.900	25.020	-.01470	.00930	.00930	.00000	.10540	-.06010	-.07180	-.05550	-.06840	.09870	614.90000										
.900	29.230	-.00840	.07240	.07240	.02440	.07670	-.07180	-.05450	-.06660	-.05030	.08350	614.90000										
.902	GRADIENT	.00207	-.00477	-.00511	-.00989	-.00109	.00123	.00048	.00002	.00002	-.00002	614.90000										

RUN NO. 126/0 RNL = 3.48 GRADIENT INTERVAL = -5.90/ 5.90

[illegible]

DATE 06 JUL 74

TABULATED SOURCE DATA - QASSA

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ARC 11-747 QASSA B C M F M V NOM. RN/L

(BEJ023) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = -40.000  
 AIRRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = -40.000 ELEV-R = -40.000

RUN NO. 125/0 RN/L = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHW	CHET	CHCO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	W
1.200	-0.771	-0.00870	.35290	.19400	.54690	-0.08090	-0.07990	-0.07300	-0.07910	.05050	576.60000
1.202	.379	-0.00790	.32930	.18920	.51850	-0.08060	-0.07940	-0.07300	-0.07910	.06070	576.60000
1.204	1.406	-0.00730	.32920	.16540	.49460	-0.08060	-0.08040	-0.07240	-0.07940	.06390	576.60000
1.205	1.904	-0.00820	.34520	.15290	.49810	-0.08010	-0.08080	-0.07230	-0.08030	.06430	576.60000
1.202	3.834	-0.00720	.45390	.07370	.52760	-0.07930	-0.08070	-0.07220	-0.08070	.06430	576.60000
1.205	5.803	-0.00640	.43460	.06150	.49610	-0.07780	-0.08030	-0.07110	-0.08060	.06180	576.60000
1.195	7.820	-0.00670	.40890	.04330	.45220	-0.07720	-0.08010	-0.07060	-0.08020	.05660	576.60000
1.193	9.187	-0.00600	.36450	.03510	.39960	-0.07580	-0.07950	-0.06970	-0.07960	.05460	576.60000
1.195	12.825	-0.00320	.32060	.03190	.35250	-0.07390	-0.07850	-0.06900	-0.08010	.04590	576.60000
1.195	15.810	-0.00480	.27200	.01910	.29110	-0.07580	-0.08060	-0.07030	-0.08130	.03620	576.60000
1.195	18.830	.00460	.25610	.01200	.21820	-0.07140	-0.06820	-0.06990	-0.07470	.02910	576.60000
1.195	21.850	.00300	.15390	.00820	.16200	-0.07380	-0.06760	-0.07050	-0.06070	.01020	576.60000
1.197	24.880	-0.01180	.14170	.00360	.14540	-0.09150	-0.05640	-0.08370	-0.05200	-.00590	576.60000
1.195	28.870	-0.00270	.08180	.00710	.08890	-0.10740	-0.07340	-0.10330	-0.07480	-.00320	576.60000
	GRADIENT	.00227	.02249	-.02671	-.00422	.00035	-.00025	.00020	-.00039	.00275	.00001

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NDM. RN/L

(08J024) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1924 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 181 / 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHE	CHEI	CHEO	CHE	CHL	CHLL	CHUR	CHLR	CHF	Q
.599	-1.648	.00000	.05880	.02320	.08200	.00000	.00000	.00000	.00000	-.02410	481.40000
.598	-.236	.00000	.05920	.02300	.08220	.00000	.00000	.00000	.00000	-.02340	481.40000
.601	3.241	.00000	.05900	.02180	.08180	.00000	.00000	.00000	.00000	-.02120	481.40000
.600	6.296	.00000	.05670	.01580	.07250	.00000	.00000	.00000	.00000	-.02130	481.40000
.598	9.315	.00000	.04920	.00700	.05620	.00000	.00000	.00000	.00000	-.02240	481.40000
.598	12.390	.00000	.03890	-.00220	.03870	.00000	.00000	.00000	.00000	-.02860	481.40000
.599	15.390	.00000	.02360	-.01750	.02810	.00000	.00000	.00000	.00000	-.03930	481.40000
.597	18.460	.00000	-.00360	-.03120	.01470	.00000	.00000	.00000	.00000	-.05980	481.40000
.597	21.440	.00000	-.00320	-.04220	-.04750	.00000	.00000	.00000	.00000	-.06690	481.40000
.599	24.480	.00000	-.02200	-.03970	-.06170	.00000	.00000	.00000	.00000	-.07060	481.40000
.598	28.980	.00000	-.03080	-.02190	-.05270	.00000	.00000	.00000	.00000	-.05730	481.40000
GRADIENT		.00000	.00002	-.00037	-.00035	.00000	.00000	.00000	.00000	.00074	.00000

RUN NO. 177 / 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHE	CHEI	CHEO	CHE	CHL	CHLL	CHUR	CHLR	CHF	Q
.797	-.638	.00000	.06580	.02590	.09160	.00000	.00000	.00000	.00000	-.01150	640.70000
.802	-.295	.00000	.06640	.02580	.09220	.00000	.00000	.00000	.00000	-.01060	640.70000
.804	3.303	.00000	.06950	.02760	.09720	.00000	.00000	.00000	.00000	-.00850	640.70000
.797	6.319	.00000	.06880	.02180	.08960	.00000	.00000	.00000	.00000	-.00680	640.70000
.794	9.331	.00000	.06120	.00210	.06290	.00000	.00000	.00000	.00000	-.00520	640.70000
.799	12.360	.00000	.04650	-.00310	.04140	.00000	.00000	.00000	.00000	-.01050	640.70000
.799	15.460	.00000	.02180	-.01560	.02620	.00000	.00000	.00000	.00000	-.02470	640.70000
.796	18.490	.00000	.01620	-.03360	-.01760	.00000	.00000	.00000	.00000	-.02800	640.70000
.796	21.570	.00000	-.00550	-.03170	-.03710	.00000	.00000	.00000	.00000	-.02520	640.70000
.799	24.710	.00000	-.02120	-.02280	-.04410	.00000	.00000	.00000	.00000	-.03160	640.70000
.794	29.330	.00000	-.03910	-.02540	-.06450	.00000	.00000	.00000	.00000	-.01330	640.70000
GRADIENT		.00000	.00006	.00047	-.00148	.00000	.00000	.00000	.00000	.00075	.00000



ARC 11-747 Q53A B C M F WA Y NOM. RN/L

BEJ24) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT.      YMEP = 32.3015 IN.  
 LREF = 14.2445 IN.        YMEP = 10000 IN.  
 OREF = 20.1004 IN.        YMEP = 11.2500 IN.  
 SCALE = 10000 SCALE

## PARAMETRIC DATA

```
BETA = .0000 ELEV-N = .0000
AILRON = .0000 BDFLAP = -11.7000
SPDRK = 55.0000 RUDDER = .0000
ELEV-L = .0000 ELEV-R = .0000
```

SEUM NO. 173/5 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CME	CHET	CME <sub>2</sub>	CHET <sub>2</sub>	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.903	- .654	.00000	.08790	.03640	.12430	.00000	.00000	.00000	.00000	-.01140	616.80000
.904	.268	.00000	.08640	.03580	.12220	.00000	.00000	.00000	.00000	-.00880	616.80000
.901	3.296	.00000	.09190	.03500	.12600	.00000	.00000	.00000	.00000	-.00370	616.80000
.899	6.268	.00000	.09230	.02280	.11510	.00000	.00000	.00000	.00000	.00180	616.80000
.904	9.294	.00000	.09260	.09310	.10170	.00000	.00000	.00000	.00000	.01790	616.80000
.897	12.320	.00000	.09330	-.00370	.04960	.00000	.00000	.00000	.00000	.02070	616.80000
.899	15.370	.00000	.09700	-.02260	-.01560	.00000	.00000	.00000	.00000	.02640	616.80000
.898	18.470	.00000	.09330	-.03740	-.03410	.00000	.00000	.00000	.00000	.03440	616.80000
.902	21.540	.00000	-.01530	-.04040	-.05570	.00000	.00000	.00000	.00000	.08120	616.80000
.900	24.700	.00000	-.04290	-.03320	-.07310	.00000	.00000	.00000	.00000	.06180	616.80000
.898	29.280	.00000	-.07500	-.03660	-.11160	.00000	.00000	.00000	.00000	.06160	616.80000
	GEACIENT		.00094	-.00033	-.00063	.00000	.00000	.00000	.00000	.00128	-.00000

FEUN NO. 169/5 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

WACH	ALPHA	CNR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUR	CHUR	CHOF	Q
1.052	-0.615	.002220	-.07480	-.04160	-.11630	.002220	.002220	.002220	.002220	.03380	627.400000
1.090	-.225	.002220	-.06990	-.03960	-.10950	.002220	.002220	.002220	.002220	.04640	627.400000
1.050	3.176	.002220	-.05730	-.02290	-.08420	.002220	.002220	.002220	.002220	.06180	627.400000
1.048	6.109	.002220	-.04490	-.01220	-.04240	.002220	.002220	.002220	.002220	.05940	627.400000
1.046	9.141	.002220	-.03290	-.02250	-.01030	.002220	.002220	.002220	.002220	.06140	627.400000
1.048	12.150	.002220	-.01130	-.04190	-.05320	.002220	.002220	.002220	.002220	.04390	627.400000
1.047	15.210	.002220	-.06260	-.05580	-.11840	.002220	.002220	.002220	.002220	.04550	627.400000
1.046	18.260	.002220	-.08400	-.06970	-.15910	.002220	.002220	.002220	.002220	.03260	627.400000
1.053	21.280	.002220	-.13170	-.08560	-.21620	.002220	.002220	.002220	.002220	.01020	627.400000
1.048	24.380	.002220	-.11560	-.08150	-.19700	.002220	.002220	.002220	.002220	-.00700	627.400000
1.050	27.420	.002220	-.13800	-.07840	-.21640	.002220	.002220	.002220	.002220	-.01300	627.400000
GRADIENT		.002220	-.06453	-.00312	-.00363	.002220	.002220	.002220	.002220		

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V MON. EN/L

(BEH 24) (12 MAR 74 )

## REFERENCE DATA

SECF = 2.4210 SQ.FT. ZNEP = 32.3010 IN.  
 LSECF = 14.2440 IN. YNEP = .0000 IN.  
 BRECF = 20.1024 IN. ZNEP = 11.2500 IN.  
 SCALE = .0350 SCALE

BETA =  
 AIRLON =  
 SPDBRK =  
 ELEV-L =

.000 ELEVON = .000  
 .000 BDFLAP = -11.700  
 .000 RUDDER = .000  
 .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 165/ 0 EN/L = 2.37 GRADIENT INTERVAL = -5.00/ 5.00

MCM	ALPHA	CMR	CMET	CMEO	CHL	CHLL	CHUR	CHLR	CHBF
1.199	-1.641	.00220	.00350	.02010	.00220	.00000	.00000	.00000	.04540
1.198	.197	.00220	.00770	.01440	.00220	.00000	.00000	.00000	.04410
1.202	3.114	.00220	.05510	.00370	.00220	.00000	.00000	.00000	.03570
1.203	6.057	.00220	.03590	-.01810	.00220	.00000	.00000	.00000	.02750
1.200	9.078	.00220	.01330	-.03360	.00220	.00000	.00000	.00000	.01990
1.197	12.100	.00220	-.02350	-.04440	.00220	.00000	.00000	.00000	.00960
1.195	15.150	.00220	-.06900	-.05730	.00220	.00000	.00000	.00000	-.00030
1.193	18.180	.00220	-.10880	-.07240	.00220	.00000	.00000	.00000	-.00750
1.196	21.240	.00220	-12.820	-.08500	.00220	.00000	.00000	.00000	-.01930
1.195	24.260	.00220	-.15400	-.08760	.00220	.00000	.00000	.00000	-.03910
1.195	27.290	.00220	-.17400	-.09790	.00220	.00000	.00000	.00000	-.06350
1.201	GRADIENT	.00220	-.00761	-.00630	.00220	.00000	.00000	.00000	-.08266



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RN/L

(BEJ025) ( 12 MAR 74 )

## REFERENCE DATA

SECF = 2.4210 SQ.FT. XMGF = 32.3010 IN.  
 LREF = 14.2440 IN. YMGF = .0000 IN.  
 BREP = 24.1004 IN. ZMGF = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOBER = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 352/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CHUL	CHUR	CHLR	CHBF	Q
.597	-4.933	.03150	.05250	.02150	-.07650	-.06700	-.09580	-.02150	479.10000
.598	-2.949	.02490	.05520	.02250	-.07100	-.06280	-.09380	-.02140	479.10000
.599	.027	.00420	.03790	.02270	-.06690	-.05980	-.09610	-.02340	479.10000
.599	3.116	.01790	.06030	.02290	-.06280	-.07170	-.10380	-.02250	479.10000
.598	5.166	.02350	.06220	.02300	-.06520	-.07730	-.11250	-.02320	479.10000
.599	6.848	.04300	.06330	.02340	-.05230	-.07860	-.11820	-.02470	479.10000
GRADIENT		.02630	.00296	.00016	.00164	-.00072	-.00017	-.00018	-.00000

RUN NO. 178/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CHUL	CHUR	CHLR	CHBF	Q
.798	-4.934	.00220	.06060	.02520	.00200	.00200	.00200	-.01150	641.10000
.799	-2.963	.00220	.06300	.02570	.00200	.00200	.00200	-.00990	641.10000
.798	-.967	.00220	.06590	.02600	.00200	.00200	.00200	-.01190	641.10000
.799	.026	.00200	.06660	.02610	.00200	.00200	.00200	-.01120	641.10000
.798	1.059	.00200	.06730	.02620	.00200	.00200	.00200	-.01030	641.10000
.798	3.117	.00200	.06930	.02640	.00200	.00200	.00200	-.01140	641.10000
.797	5.179	.00200	.07100	.02670	.00200	.00200	.00200	-.01160	641.10000
.797	7.237	.00200	.07260	.02700	.00200	.00200	.00200	-.01210	641.10000
GRADIENT		.00200	.00100	.00014	.00000	.00000	.00000	-.00001	-.00000

RUN NO. 349/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CHUL	CHUR	CHLR	CHBF	Q
.903	-4.945	-.04710	.06950	.02630	-.06830	-.07050	-.10570	-.00770	613.90000
.902	-2.955	-.02630	.07640	.03250	-.06110	-.07440	-.10150	-.00380	613.90000
.907	.028	-.00400	.08250	.03400	-.07730	-.07670	-.10630	-.00490	613.90000
.903	3.121	.01760	.08910	.03610	-.07450	-.08270	-.11750	-.00500	613.90000
.906	5.145	.03660	.08790	.03620	-.07010	-.08830	-.12150	-.00240	613.90000
.901	6.734	.05940	.08880	.03640	-.05240	-.08650	-.13190	-.00240	613.90000
GRADIENT		.00783	.00236	.00089	.00161	-.00143	-.00156	.00022	.00000

ARC 11-747 QMS3A B C M F M V NOM. RN/L

(0EJ025) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDLAP = -11.700  
 SPDPRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 170/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.052	-4.953	.00000	.06080	.04100	.10180	.00000	.00000	.00000	.00000	.05460	628.00000
1.051	-2.961	.00000	.06410	.04100	.10500	.00000	.00000	.00000	.00000	.04830	628.00000
1.052	-.964	.00000	.06860	.04010	.10860	.00000	.00000	.00000	.00000	.04430	628.00000
1.052	.029	.00000	.07020	.03940	.10960	.00000	.00000	.00000	.00000	.04980	628.00000
1.049	1.057	.00000	.06840	.03810	.10660	.00000	.00000	.00000	.00000	.05030	628.00000
1.048	3.113	.00000	.07160	.03470	.10630	.00000	.00000	.00000	.00000	.05420	628.00000
1.053	5.184	.00000	.07790	.02870	.10660	.00000	.00000	.00000	.00000	.05280	628.00000
1.050	7.007	.00000	.08060	.02480	.11340	.00000	.00000	.00000	.00000	.04840	628.00000
GRADIENT		.00000	.00133	-.00075	.00059	.00000	.00000	.00000	.00000	.00006	.00000

RUN NO. 347/ 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.201	-4.944	-.06490	.06560	.02770	.09330	-.15920	-.18470	-.14480	-.13420	.04010	572.90000
1.201	-2.956	-.04220	.07010	.02230	.09250	-.15690	-.17840	-.14720	-.14580	.04610	572.90000
1.202	.028	-.00590	.07870	.01500	.09370	-.15480	-.16630	-.15340	-.16170	.04610	572.90000
1.199	3.119	.03620	.08310	.01000	.09510	-.14990	-.14670	-.15830	-.17450	.04560	572.90000
1.196	5.180	.06490	.08740	.00700	.09440	-.14280	-.13610	-.16200	-.18170	.04140	572.90000
1.200	6.708	.09400	.08950	.00510	.09450	-.12770	-.13180	-.16720	-.18640	.03700	572.90000
GRADIENT		.01254	.00247	-.00220	.00026	.00111	.00469	-.00173	-.00501	.00055	-.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 333

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ026) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPOBRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 183/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-5.015	.00000	.04190	.00800	.05000	.00000	.00000	.00000	.00000	-.02370	482.00000
.599	-2.995	.00000	.04370	.00720	.05100	.00000	.00000	.00000	.00000	-.02460	482.00000
.600	-.985	.00000	.04590	.00600	.05190	.00000	.00000	.00000	.00000	-.02330	482.00000
.599	.027	.00000	.04710	.00540	.05250	.00000	.00000	.00000	.00000	-.02240	482.00000
.599	1.041	.00000	.04750	.00480	.05230	.00000	.00000	.00000	.00000	-.02390	482.00000
.597	3.061	.00000	.05100	.00390	.05500	.00000	.00000	.00000	.00000	-.02440	482.00000
.598	5.087	.00000	.05410	.00420	.05820	.00000	.00000	.00000	.00000	-.02760	482.00000
.600	7.102	.00000	.05800	.00400	.06110	.00000	.00000	.00000	.00000	-.03030	482.00000
.598	9.123	.00000	.05870	.00490	.06360	.00000	.00000	.00000	.00000	-.03320	482.00000
GRADIENT		.00000	.00116	-.00055	.00061	.00000	.00000	.00000	.00000	-.00000	-.00000

RUN NO. 179/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.796	-5.033	.00000	.05130	-.00030	.05110	.00000	.00000	.00000	.00000	-.00950	639.10000
.797	-3.026	.00000	.05420	-.00090	.05330	.00000	.00000	.00000	.00000	-.00840	639.10000
.796	-.984	.00000	.05750	-.00090	.05830	.00000	.00000	.00000	.00000	-.00680	639.10000
.795	.028	.00000	.05750	-.00100	.05650	.00000	.00000	.00000	.00000	-.00470	639.10000
.801	1.046	.00000	.05850	-.00110	.05740	.00000	.00000	.00000	.00000	-.00510	639.10000
.800	3.073	.00000	.06120	-.00060	.06060	.00000	.00000	.00000	.00000	-.00740	639.10000
.795	5.107	.00000	.06400	.00030	.06440	.00000	.00000	.00000	.00000	-.00990	639.10000
.799	7.144	.00000	.06640	.00120	.06760	.00000	.00000	.00000	.00000	-.00760	639.10000
.796	9.168	.00000	.06850	.00180	.07020	.00000	.00000	.00000	.00000	-.01430	639.10000
GRADIENT		.00000	.00109	-.00025	.00104	.00000	.00000	.00000	.00000	.00023	.00000

RUN NO. 350/ 0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.034	-.05500	.07170	.00640	.07810	-.08450	-.14080	-.07270	-.09760	.02350	613.00000
.903	-3.008	-.03750	.07540	.00500	.08050	-.07800	-.12650	-.07040	-.09660	.02440	613.00000
.899	.030	-.00490	.08340	.00570	.08310	-.07190	-.10990	-.07210	-.10480	.02000	613.00000
.902	3.076	.03110	.09190	.00620	.09800	-.06900	-.10100	-.07960	-.12150	.02310	613.00000
.898	5.106	.04610	.09370	.00700	.10070	-.06990	-.10020	-.08400	-.13220	.02530	613.00000
.903	7.137	.07050	.09330	.00730	.10050	-.05110	-.09210	-.08080	-.13280	.02210	613.00000
GRADIENT		.01128	.00271	.00020	.00288	.00148	.00419	-.00151	-.00409	-.00021	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

PAGE 334

ARC 11-747 QAS3A B C H F M V NOM. RN/L

(BEJ526) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SFCBRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 171/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
1.051	-5.027	.00000	.00780	-.02870	-.02090	.00000	.00000	.00000	.00000	.05230	628.70000
1.053	-5.007	.00000	.01400	-.03000	-.01610	.00000	.00000	.00000	.00000	.05360	628.70000
1.047	-.985	.00000	.02180	-.02990	-.00810	.00000	.00000	.00000	.00000	.05370	628.70000
1.050	.030	.00000	.02460	-.02990	-.00530	.00000	.00000	.00000	.00000	.05270	628.70000
1.049	1.043	.00000	.02460	-.03020	-.00560	.00000	.00000	.00000	.00000	.05370	628.70000
1.052	3.065	.00000	.03200	-.02890	.00310	.00000	.00000	.00000	.00000	.05170	628.70000
1.047	5.099	.00000	.03750	-.02680	.01070	.00000	.00000	.00000	.00000	.05190	628.70000
1.050	7.125	.00000	.04040	-.02720	.01320	.00000	.00000	.00000	.00000	.04850	628.70000
1.047	9.151	.00000	.04180	-.02660	.01520	.00000	.00000	.00000	.00000	.04720	628.70000
GRADIENT		.00000	.00281	.00015	.00297	.00000	.00000	.00000	.00000	-.00020	-.00000

RUN NO. 167/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
1.202	-5.030	.00000	-.00840	-.03620	-.04460	.00000	.00000	.00000	.00000	.01250	570.80000
1.202	-5.002	.00000	-.00410	-.03820	-.04230	.00000	.00000	.00000	.00000	.01500	570.80000
1.199	-.981	.00000	.00250	-.03770	-.03520	.00000	.00000	.00000	.00000	.01720	570.80000
1.201	.033	.00000	.00400	-.03770	-.03370	.00000	.00000	.00000	.00000	.01660	570.80000
1.197	1.038	.00000	.00540	-.03770	-.03230	.00000	.00000	.00000	.00000	.01520	570.80000
1.199	3.066	.00000	.00860	-.03690	-.02830	.00000	.00000	.00000	.00000	.01330	570.80000
1.198	5.095	.00000	.01220	-.03590	-.02370	.00000	.00000	.00000	.00000	.01500	570.80000
1.197	7.119	.00000	.01270	-.03470	-.02190	.00000	.00000	.00000	.00000	.01230	570.80000
1.200	9.154	.00000	.01410	-.03430	-.02020	.00000	.00000	.00000	.00000	.01250	570.80000
GRADIENT		.00000	.00203	.00019	.00222	.00000	.00000	.00000	.00000	-.00035	-.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F M V NDM, RN/L

(BEJ027) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHUR	CHLL	CHUR	CHLL	CHLR	CHBF	Q
.600	-5.002	-0.04650	-0.01200	-0.03440	-0.07360	-0.06710	-0.13640	-0.06710	-0.13640	-0.09640	-0.05990	483.200000
.600	-2.992	-0.03710	-0.00970	-0.03650	-0.06780	-0.05940	-0.12330	-0.05940	-0.12330	-0.09460	-0.06030	483.200000
.600	.026	-0.00180	-0.00890	-0.03890	-0.06260	-0.06350	-0.10660	-0.06350	-0.10660	-0.10400	-0.06420	483.200000
.599	3.069	.02790	-0.04650	-0.03870	-0.05940	-0.06790	-0.10260	-0.06790	-0.10260	-0.12000	-0.05860	483.200000
.599	5.095	.03900	-0.04430	-0.03740	-0.06900	-0.07600	-0.10340	-0.07600	-0.10340	-0.13320	-0.05760	483.200000
.599	7.120	.05590	-0.04650	-0.03690	-0.06500	-0.08540	-0.10860	-0.08540	-0.10860	-0.14410	-0.06820	483.200000
GRADIENT	.01072	.00053	.00017	.00036	.00139	.00140	.00374	.00140	.00374	.00419	.00028	-0.00000

RUN NO. 180/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHUR	CHLL	CHUR	CHLL	CHLR	CHBF	Q
.798	-5.047	.00000	.01540	-0.03600	.00000	.00000	.00000	.00000	.00000	.00000	-0.02270	641.100000
.798	-3.012	.00000	.00730	-0.03210	.00000	.00000	.00000	.00000	.00000	.00000	-0.02350	641.100000
.798	-.981	.00000	.00250	-0.03460	.00000	.00000	.00000	.00000	.00000	.00000	-0.02700	641.100000
.798	.033	.00000	.00070	-0.03570	.00000	.00000	.00000	.00000	.00000	.00000	-0.02660	641.100000
.798	1.057	.00000	-0.00030	-0.03700	.00000	.00000	.00000	.00000	.00000	.00000	-0.03020	641.100000
.797	3.096	.00000	-0.00210	-0.03890	.00000	.00000	.00000	.00000	.00000	.00000	-0.02700	641.100000
.794	5.146	.00000	-0.00440	-0.04210	.00000	.00000	.00000	.00000	.00000	.00000	-0.02610	641.100000
.796	7.185	.00000	-0.00590	-0.04120	.00000	.00000	.00000	.00000	.00000	.00000	-0.02960	641.100000
.797	9.230	.00000	-0.01020	-0.03500	.00000	.00000	.00000	.00000	.00000	.00000	-0.03280	641.100000
GRADIENT	.00000	.00000	-0.00152	-0.00112	.00000	.00000	.00000	.00000	.00000	.00000	-0.00067	-0.00000

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHUR	CHLL	CHUR	CHLL	CHLR	CHBF	Q
.902	-5.060	-0.00680	.00000	-0.03670	-0.06920	-0.06750	-0.08900	-0.06750	-0.08900	-0.10400	.07850	615.900000
.901	-3.017	-0.01250	.00070	-0.04420	-0.08510	-0.07450	-0.12320	-0.07450	-0.12320	-0.12130	.07480	615.900000
.902	.034	-0.00790	-0.00430	-0.04520	-0.07620	-0.07770	-0.13160	-0.07770	-0.13160	-0.12210	.07340	615.900000
.899	3.101	-0.00010	-0.01360	-0.04690	-0.07470	-0.09010	-0.12710	-0.09010	-0.12710	-0.11150	.07350	615.900000
.905	5.143	.00320	-0.01980	-0.04690	-0.07040	-0.09440	-0.11140	-0.09440	-0.11140	-0.09160	.07570	615.900000
.897	7.185	-0.01570	-0.02010	-0.04440	-0.05270	-0.08490	-0.08680	-0.08490	-0.08680	-0.07030	.06640	615.900000
GRADIENT	.00203	.00203	-0.00315	-0.00244	.00170	-0.00264	-0.00255	-0.00255	-0.00264	.00160	-0.00021	-0.00000

ARC 11-747 0A53A B C M F M V NOM. RN/L

(BEJ027) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4215 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPOBRK = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 172/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHUR	CHUR	CHEF	Q
1.052	-5.040	.00000	-11590	-07320	-18910	.00000	.00000	.00000	.00000	.00000	.02250	628.40000
1.051	-3.013	.00000	-12460	-07910	-20370	.00000	.00000	.00000	.00000	.00000	.02070	628.40000
1.051	-.987	.00000	-12560	-07990	-20550	.00000	.00000	.00000	.00000	.00000	.02230	628.40000
1.048	.019	.00000	-12690	-08180	-20870	.00000	.00000	.00000	.00000	.00000	.01940	628.40000
1.050	1.041	.00000	-12530	-08120	-20650	.00000	.00000	.00000	.00000	.00000	.01700	628.40000
1.048	3.086	.00000	-11550	-07980	-19530	.00000	.00000	.00000	.00000	.00000	.01610	628.40000
1.051	5.125	.00000	-11600	-08130	-19730	.00000	.00000	.00000	.00000	.00000	.02550	628.40000
1.053	7.162	.00000	-12740	-08150	-20880	.00000	.00000	.00000	.00000	.00000	.01930	628.40000
1.051	9.216	.00000	-11440	-07780	-19220	.00000	.00000	.00000	.00000	.00000	.01430	628.40000
	GRADIENT	.00000	.00136	-.00017	.00120	.00000	.00000	.00000	.00000	.00000	-.00094	.00000

RUN NO. 348/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHUR	CHUR	CHEF	Q
1.200	-5.035	-.06030	-12780	-07400	-20190	-.13990	-.12590	-.10650	-.09890	-.09890	-.01390	572.70000
1.203	-3.010	-.05040	-12540	-07800	-20340	-.13530	-.12860	-.10870	-.10470	-.10470	-.01630	572.70000
1.202	.021	-.00240	-13110	-08170	-21280	-.11980	-.12030	-.11850	-.11920	-.11920	-.01350	572.70000
1.199	3.078	.04750	-13160	-08190	-21350	-.10450	-.10160	-.12690	-.12480	-.12480	-.02120	572.70000
1.197	5.122	.06410	-12890	-07970	-20860	-.10070	-.09740	-.13730	-.12490	-.12490	-.01400	572.70000
1.199	7.156	.07050	-12490	-07810	-20300	-.09590	-.08830	-.14440	-.11030	-.11030	-.00930	572.70000
	GRADIENT	.01608	-.00102	-.00064	-.00166	.00506	.00444	-.00332	-.00330	-.00330	-.00048	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F V NOM. RN/L

(BEJ028) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3015 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDFAP = .000  
 SPDBRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 284/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-633	-00240	.05420	.02200	.07610	-.02090	-.04260	-.02190	-.03920	-.03540	477.10000
.598	.086	-.00220	.05510	.02220	.07730	-.02090	-.04280	-.02180	-.03960	-.03680	477.10000
.600	.593	-.00190	.05470	.02200	.07670	-.02050	-.04250	-.02170	-.03940	-.03610	477.10000
.605	1.615	-.00250	.05480	.02170	.07650	-.02060	-.04300	-.02170	-.03940	-.03700	477.10000
.599	3.567	-.00240	.05480	.02150	.07630	-.02070	-.04300	-.02160	-.03960	-.03590	477.10000
.598	5.554	-.00210	.05280	.01740	.07330	-.02060	-.04320	-.02180	-.03990	-.03700	477.10000
.597	7.611	-.00210	.04950	.01190	.06140	-.02050	-.04330	-.02170	-.04000	-.03790	477.10000
.597	9.598	-.00200	.04410	.00640	.05160	-.02060	-.04320	-.02180	-.04010	-.04110	477.10000
.597	12.630	-.00280	.03440	.00070	.03510	-.02080	-.04340	-.02190	-.03950	-.04650	477.10000
.598	15.690	-.00220	.01660	-.01990	-.02330	-.02090	-.04280	-.02170	-.03980	-.05860	477.10000
.599	18.730	-.00220	-.01160	-.03070	-.04240	-.02150	-.04370	-.02260	-.04040	-.07930	477.10000
.595	21.720	-.00180	-.01280	-.04390	-.05670	-.02340	-.04530	-.02460	-.04240	-.09020	477.10000
.598	24.710	-.00090	-.02660	-.04520	-.07180	-.02670	-.04940	-.02780	-.04750	-.09890	477.10000
.598	28.650	-.00010	-.03360	-.02400	-.05760	-.03970	-.05710	-.03930	-.05750	-.10680	477.10000
GRADIENT		-.00004	.00007	-.00015	-.00007	.00005	-.00010	.00006	-.00006	-.00005	.00000

RUN NO. 283/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-.665	-.00310	.06020	.02550	.08350	-.02200	-.04660	-.02200	-.04350	-.03770	641.80000
.801	.073	-.00250	.06160	.02510	.08370	-.02180	-.04680	-.02200	-.04320	-.03640	641.80000
.801	1.102	-.00180	.06140	.02520	.08670	-.02150	-.04560	-.02200	-.04330	-.03620	641.80000
.802	3.552	-.00170	.06170	.02510	.08680	-.02160	-.04540	-.02200	-.04320	-.03680	641.80000
.801	5.552	-.00180	.06380	.02750	.09130	-.02140	-.04520	-.02200	-.04300	-.03640	641.80000
.799	7.607	-.00130	.06390	.02330	.08720	-.02110	-.04460	-.02200	-.04290	-.03610	641.80000
.800	9.581	-.00090	.05970	.01330	.07230	-.02100	-.04530	-.02190	-.04310	-.03780	641.80000
.798	12.610	-.00090	.05460	.00060	.05520	-.02120	-.04540	-.02190	-.04380	-.04030	641.80000
.800	15.700	-.00180	.04010	-.00630	.03380	-.02170	-.04630	-.02240	-.04380	-.04860	641.80000
.799	18.730	-.00150	.01020	-.01870	-.02850	-.02260	-.04780	-.02390	-.04510	-.06550	641.80000
.798	21.740	-.00460	-.01340	-.03890	-.05230	-.02310	-.05150	-.02970	-.05000	-.08500	641.80000
.799	24.700	-.01000	-.02720	-.03750	-.05470	-.03750	-.06140	-.03680	-.05210	-.10300	641.80000
.796	28.660	-.01210	-.04510	-.02440	-.06450	-.04630	-.06620	-.04630	-.05410	-.11010	641.80000
GRADIENT		-.00032	.00089	-.00049	-.00138	.00014	-.00031	-.00000	.00010	.00021	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NDM, RN/L

(BEJ028) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA =  
 AIRLON =  
 SPDBRK =  
 ELEV-L =

.000 ELEVON = .000  
 .000 BDFLAP = .000  
 25.000 RUDDER = .000  
 .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 282/ 0 RN/L = 3.71 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.898	-1.562	-0.0570	.07100	.03490	.03590	-0.02710	-0.04760	-0.04100	609.90000
.900	-1.559	-0.05540	.07120	.03420	.03540	-0.02740	-0.04760	-0.04250	609.90000
.899	1.074	-0.05600	.07300	.03190	.03480	-0.02640	-0.04700	-0.04150	609.90000
.899	1.072	-0.05630	.07450	.03000	.03450	-0.02630	-0.04700	-0.04200	609.90000
.902	3.536	-0.05480	.07990	.03030	.03100	-0.02540	-0.04720	-0.04570	609.90000
.899	5.535	-0.05460	.08460	.02800	.03120	-0.02430	-0.04530	-0.04660	609.90000
.900	7.596	-0.05430	.08460	.01400	.03080	-0.02400	-0.04490	-0.04660	609.90000
.899	9.565	-0.05700	.08740	.00960	.03450	-0.02400	-0.04490	-0.04890	609.90000
.900	12.590	-0.05420	.05510	-0.0510	.03510	-0.02410	-0.04510	-0.05170	609.90000
.900	15.650	-0.05290	.00210	-0.02270	.03000	-0.02480	-0.04530	-0.05640	609.90000
.900	18.710	-0.05470	-0.00590	-0.04160	.03440	-0.03400	-0.04950	-0.06630	609.90000
.898	21.720	-0.05640	-0.01680	-0.04390	.03420	-0.03390	-0.05500	-0.07700	609.90000
.898	24.710	-0.05120	-0.03500	-0.02930	.03670	-0.05580	-0.04830	-0.09040	609.90000
.901	28.680	-0.05440	-0.07490	-0.03650	-0.03300	-0.06620	-0.05190	-0.12960	609.90000
GRADIENT		.00015	.00220	-0.00121	.00099	.00048	.00012	-0.00098	.00000

RUN NO. 281/ 0 RN/L = 3.47 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
1.050	-1.653	-0.05660	.07280	.04120	.03700	-0.05590	-0.07400	-0.01790	626.90000
1.051	-1.642	-0.05610	.07030	.03910	.03690	-0.05490	-0.07200	-0.01890	626.90000
1.052	1.066	-0.05680	.06630	.03290	.03910	-0.05360	-0.07140	-0.02300	626.90000
1.055	1.582	-0.05690	.06430	.02970	.03400	-0.05260	-0.07000	-0.02530	626.90000
1.050	3.537	-0.05730	.05500	.01740	.03720	-0.05890	-0.06680	-0.02740	626.90000
1.051	5.518	-0.05830	.04680	.00010	.03640	-0.05620	-0.06390	-0.03590	626.90000
1.054	7.592	-0.05810	.04180	-0.01480	.03710	-0.05260	-0.06190	-0.04300	626.90000
1.051	9.569	-0.05030	.02670	-0.02700	.03030	-0.05560	-0.06150	-0.04820	626.90000
1.050	12.620	-0.05370	-0.01700	-0.04460	.03450	-0.05340	-0.05830	-0.06320	626.90000
1.049	15.650	-0.05370	-0.06540	-0.05730	.03000	-0.05390	-0.04570	-0.08140	626.90000
1.049	18.710	-0.05300	-0.10300	-0.07190	.04070	-0.03280	-0.03880	-0.11070	626.90000
1.050	21.750	-0.05460	-0.13680	-0.07900	.04160	-0.02950	-0.03450	-0.14770	626.90000
1.051	24.720	-0.05560	-0.16820	-0.08810	.03870	-0.07820	-0.05500	-0.17240	626.90000
1.051	28.690	-0.05190	-0.14760	-0.07380	.05690	-0.08710	-0.06330	-0.22020	626.90000
GRADIENT		-0.00223	-0.00425	-0.00582	.00144	.00165	.00164	-0.00243	.00000

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NOM. RN/L

08EJ028) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .000  
 AILROM = .000  
 SPD8RK = 25.000  
 ELEV-L = .000  
 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 280/ 0 RN/L = 2.97 GRADIENT INTERVAL = -9.00/ 5.00

MACH	ALPHA	CNR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHLF	Q
1.200	-655	-004400	.02430	.01320	.10350	-.07160	-.06490	-.06830	-.06340	-.03780	567.300000
1.204	-648	-004460	.07850	.01400	.09250	-.07050	-.06340	-.06790	-.06140	-.04040	567.300000
1.208	1.056	-005000	.07050	.02830	.07890	-.06980	-.06290	-.06700	-.06070	-.04380	567.300000
1.198	1.170	-004440	.06690	.04610	.07300	-.06930	-.06200	-.06670	-.06020	-.04690	567.300000
1.198	3.541	-005000	.05140	.02510	.04620	-.06760	-.06160	-.06460	-.05870	-.05680	567.300000
1.199	5.511	-004480	.04220	.01590	.02640	-.06610	-.06120	-.06370	-.05870	-.05330	567.300000
1.199	7.594	-004440	.02620	.02750	-.00130	-.06450	-.06160	-.06190	-.05870	-.07330	567.300000
1.201	9.562	-00490	.02660	-.03680	-.03020	-.06380	-.06190	-.06140	-.05840	-.08380	567.300000
1.197	12.590	-00460	-.02800	-.04770	-.07370	-.06230	-.06160	-.05980	-.05850	-.09350	567.300000
1.196	15.650	-00420	-.08160	-.06160	-.14330	-.06390	-.06090	-.06170	-.05890	-.11740	567.300000
1.197	18.700	-00620	-.11980	-.07750	-.19720	-.06660	-.06490	-.06350	-.06180	-.14210	567.300000
1.197	21.690	-00610	-.12610	-.08720	-.21330	-.06310	-.05660	-.06250	-.05700	-.16740	567.300000
1.197	24.690	.00010	-.15660	-.09300	-.24960	-.06620	-.05420	-.06560	-.05490	-.19980	567.300000
1.196	28.610	-00580	-.18030	-.09630	-.27660	-.07460	-.04940	-.07090	-.04740	-.23820	567.300000
GRADIENT		-.00024	-.00781	-.00568	-.01351	-.00092	-.00074	-.00089	-.00102	-.00455	.000000

ARC 11-747 QAS3A B C H F W V NOM. RN/L

(BEJ029) ( 12 MAR 74 )

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. DRFP = 32.3510 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEMN = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 219/ 0 RN/L = 3.95 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHL	CHLL	CHUR	CHLR	CHBF	Q
.598	-4.943	.07600	.07710	.00450	-.02500	-.03970	-.05670	-.01210	475.80000
.600	-2.954	.06390	.06790	.00870	-.02160	-.03950	-.05730	-.01290	475.80000
.605	-.976	.05800	.06150	.01280	-.01890	-.04210	-.06200	-.01320	475.80000
.598	.019	.05480	.06320	.01490	-.01890	-.04370	-.06510	-.01280	475.80000
.601	1.046	.11010	.08290	.01590	-.01840	-.04530	-.06730	-.01270	475.80000
.599	3.111	.11820	.08530	.01670	-.02150	-.04930	-.07370	-.01290	475.80000
.597	5.161	.12540	.08630	.01570	-.02470	-.05330	-.08110	-.01390	475.80000
.599	6.745	.13.40	.08420	.01590	-.02840	-.05680	-.08620	-.01560	475.80000
	GRADIENT	.00554	.00387	.00160	.00053	-.00123	-.00218	-.00007	-.00000

RUN NO. 214/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHL	CHLL	CHUR	CHLR	CHBF	Q
.799	-4.958	.09120	.08460	.00850	-.02300	-.04180	-.06400	-.00170	642.80000
.801	-2.963	.08900	.08710	.01430	-.01930	-.04130	-.06270	-.00350	642.80000
.802	-.977	.11440	.08980	.01920	-.01740	-.04410	-.06850	-.00310	642.80000
.803	.022	.12110	.09170	.02080	-.01760	-.04610	-.07170	-.00280	642.80000
.800	1.090	.12700	.09170	.02240	-.01810	-.04760	-.07510	-.00180	642.80000
.797	3.112	.13530	.08850	.02230	-.01980	-.05140	-.08150	-.00200	642.80000
.798	5.179	.13930	.08610	.01820	-.02400	-.05590	-.08910	-.00380	642.80000
	GRADIENT	.00580	.00105	.00180	.00040	-.00126	-.00234	.00005	-.00000

RUN NO. 213/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHL	CHLL	CHUR	CHLR	CHBF	Q
.902	-4.961	.11100	.09380	.01620	-.02590	-.04860	-.07210	.00250	616.30000
.902	-2.967	.12310	.09370	.02380	-.02130	-.04840	-.07220	.00230	616.30000
.901	-.977	.13650	.09360	.02700	-.01990	-.05180	-.07860	.00110	616.30000
.904	.019	.14570	.08440	.02830	-.02070	-.05450	-.08360	-.00080	616.30000
.906	1.050	.15190	.08620	.02960	-.02010	-.05630	-.08560	-.00090	616.30000
.903	3.111	.16290	.08920	.02600	-.02080	-.06150	-.09250	.00140	616.30000
.900	5.174	.16260	.08650	.02280	-.02390	-.06460	-.09910	.00310	616.30000
.899	6.765	.14740	.08330	.02840	-.03660	-.07710	-.11130	.00160	616.30000
	GRADIENT	.00656	.00319	.00171	.00057	-.00154	-.00271	-.00030	-.00000

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H M V NOM. RN/L

(BEJ023) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. MWRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

ALPHA = .000 ELEWON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SFCBRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 208/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNEI	CNEO	CNET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.052	-4.961	.18110	.06260	.04130	.10390	-.02090	-.02890	-.10890	-.10260	.04710	628.30000
1.054	-2.965	.20040	.06590	.04160	.10760	-.02120	-.02450	-.11510	-.10860	.03760	628.30000
1.051	-.965	.21590	.07010	.04120	.11130	.02440	-.02900	-.12010	-.11600	.02520	628.30000
1.048	.018	.22110	.07140	.04040	.11190	.02750	-.02530	-.12570	-.11830	.03130	628.30000
1.050	1.049	.22800	.07190	.03920	.11110	.02890	-.02600	-.12310	-.12200	.04670	628.30000
1.053	3.114	.23850	.07620	.03530	.11150	.02830	-.02650	-.12760	-.12910	.05360	628.30000
1.051	5.177	.24850	.07940	.02970	.10920	.02920	-.02240	-.12890	-.13280	.05220	628.30000
1.050	6.863	.26320	.08880	.02670	.11480	.02890	-.02230	-.13530	-.14140	.05170	628.30000
	GRADIENT	.02709	.00166	-.02269	.02096	.02133	.02017	-.02230	-.00328	.02089	.00000

RUN NO. 205/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNEI	CNEO	CNET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.202	-4.950	.14250	.06670	.02740	.09400	-.02130	-.03230	-.10170	-.09440	.04340	569.90000
1.199	-2.953	.17220	.07160	.02340	.09560	-.01860	-.02480	-.11630	-.09930	.04700	569.90000
1.199	-.966	.19390	.07710	.01770	.09480	-.01450	-.02070	-.12490	-.10420	.04770	569.90000
1.201	.020	.20630	.07970	.01480	.09450	-.01230	-.01840	-.12920	-.10780	.04690	569.90000
1.202	1.049	.21720	.08180	.01260	.09440	-.01100	-.01780	-.13330	-.11280	.04700	569.90000
1.199	3.121	.23890	.08580	.00950	.09540	-.01030	-.01580	-.14160	-.12340	.04280	569.90000
1.201	5.173	.25860	.08890	.00610	.09590	-.00760	-.01280	-.14610	-.13300	.04110	569.90000
1.203	6.751	.27920	.09080	.00420	.09490	-.00620	-.01150	-.14750	-.14010	.04000	569.90000
	GRADIENT	.01184	.00242	-.00233	.02010	.02149	.02022	-.02482	-.00351	-.00204	.00000

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ035) ( 12 MAR 74 )

## REFERENCE DATA

SDEF = 2.4210 SQ.FT. YMEP = 32.3010 IN.  
 LEET = 14.2440 IN. YMEP = .0020 IN.  
 BEET = 26.1004 IN. ZMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 210/ 0 RN/L = 3.90 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CHEI	CHLL	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.598	-5.017	.06870	.04280	.00870	.05140	.00370	.00930	.02590	.00930	.05470	.01640	480.80000
.597	-3.002	.07820	.04450	.00770	.05220	.00530	.00870	.02170	.00800	.05560	.01520	480.80000
.596	-3.983	.09070	.04650	.00660	.05310	.01030	.00930	.01860	.00930	.05670	.01470	480.80000
.600	.022	.09560	.04800	.00550	.05400	.01390	.01030	.01920	.00820	.05780	.01510	480.80000
.599	1.037	.10090	.04910	.00560	.05470	.01260	.01030	.01980	.00650	.05840	.01590	480.80000
.598	3.054	.10670	.05180	.00510	.05690	.01240	.01030	.02470	.00640	.05720	.01780	480.80000
.599	5.080	.11350	.05420	.00530	.05950	.00970	.01030	.02720	.00510	.05990	.01920	480.80000
.597	7.101	.11910	.05710	.00530	.06240	.00810	.01030	.03280	.00570	.06070	.02110	480.80000
.599	9.131	.12950	.05940	.00580	.06530	.00750	.01030	.03910	.00530	.06580	.02900	480.80000
GRADIENT	.00474	.00121	.00044	.00076	.00076	.00117	.00050	.00050	.00141	.00267	.00045	.00000

RUN NO. 215/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CHEI	CHLL	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.738	-5.040	.07630	.05140	.00010	.05130	.00230	.00400	.02260	.00400	.05610	.00090	641.30000
.800	-3.012	.08740	.05440	.00080	.05380	.00900	.00380	.01830	.00380	.05870	.00170	641.30000
.800	-.987	.10340	.05730	.00060	.05790	.01440	.00400	.01760	.00400	.06010	.00100	641.30000
.800	.026	.11400	.05660	.00120	.05540	.01560	.00420	.01810	.00420	.06140	.00180	641.30000
.799	1.040	.11630	.05670	.00120	.05550	.01660	.00430	.01840	.00430	.06170	.00110	641.30000
.797	3.065	.12110	.06110	.00050	.06090	.01520	.00420	.02210	.00420	.06390	.00050	641.30000
.799	5.102	.12260	.06430	.00090	.06510	.00970	.00530	.02820	.00530	.06770	.00070	641.30000
.801	7.132	.13190	.06640	.00150	.06790	.00590	.00590	.03240	.00610	.06990	.00320	641.30000
.800	9.161	.14340	.06770	.00180	.06940	.01050	.00640	.03660	.00640	.07020	.00090	641.30000
GRADIENT	.00563	.00096	.00004	.00000	.00096	.00103	.00051	.00051	.00160	.00352	.00032	.00000

RUN NO. 212/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CHEI	CHLL	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.902	-5.043	.09290	.06630	.00570	.07190	.00860	.00450	.02360	.00450	.06130	.02820	615.90000
.903	-3.013	.10260	.07320	.00560	.07880	.01840	.00430	.01930	.00430	.06240	.02670	615.90000
.903	-.990	.11660	.07970	.00540	.08520	.02220	.00440	.02000	.00440	.06700	.02770	615.90000
.904	.022	.12430	.08160	.00510	.08670	.02300	.00430	.02130	.00430	.07540	.02960	615.90000
.900	1.037	.13290	.08160	.00410	.08570	.02410	.00490	.02260	.00490	.07680	.03160	615.90000
.902	3.069	.14030	.08930	.00570	.09500	.02360	.00520	.02400	.00520	.08610	.02670	615.90000
.902	5.101	.14220	.09260	.00640	.09900	.01720	.00560	.02760	.00560	.08630	.02680	615.90000
.901	7.133	.14560	.09230	.00740	.09970	.00580	.00580	.03480	.00580	.08600	.02560	615.90000
.903	8.472	.14840	.09140	.00720	.09860	.00520	.00520	.03760	.00520	.08600	.02560	615.90000
GRADIENT	.00431	.00248	.00000	.00000	.00242	.00086	.00082	.00082	.00135	.00432	.00014	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. EN/L

(0EJ030) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 209/0 EN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CMEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.053	-5.036	.14230	.02690	-.02850	-.02160	.00350	-.01700	-.07620	-.04040	.06150	629.70000
1.052	-3.013	.16350	.01180	-.03050	-.01870	.00990	-.01640	-.08870	-.08330	.06440	629.70000
1.050	-.990	.17690	.02250	-.02950	-.00750	.01370	-.01720	-.09300	-.08740	.06400	629.70000
1.051	.019	.19170	.02540	-.02960	-.00420	.01470	-.01860	-.10130	-.09430	.06440	629.70000
1.050	1.036	.20630	.02370	-.02980	-.00410	.01510	-.01860	-.10800	-.10170	.06170	629.70000
1.049	3.062	.22770	.03210	-.02930	.00280	.01490	-.02020	-.11530	-.11740	.06150	629.70000
1.050	5.090	.23330	.03630	-.02680	.00950	.01490	-.02120	-.11250	-.12710	.05580	629.70000
1.046	7.116	.24370	.04160	-.02610	.01550	.01290	-.02130	-.11600	-.13640	.05630	629.70000
1.048	9.146	.25410	.04670	-.02480	.02190	.01150	-.02490	-.12150	-.14600	.05210	629.70000
GRADIENT	.01096	.00319	.00016	.00335	.00261	.00260	-.00260	-.00498	-.00376	-.00254	.00000

RUN NO. 206/0 EN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CMEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.198	-5.027	.14550	.02680	-.03650	-.04510	-.01020	-.01200	-.08580	-.08180	.02600	569.30000
1.198	-3.003	.16720	.02520	-.03850	-.04350	-.01220	-.01410	-.09880	-.08750	.02650	569.30000
1.201	-.990	.17270	.02130	-.03810	-.03680	-.00980	-.01740	-.10740	-.09250	.02600	569.30000
1.200	.021	.17870	.02330	-.03790	-.03460	-.00830	-.01780	-.10990	-.09490	.02560	569.30000
1.199	1.040	.18370	.02420	-.03780	-.03360	-.00660	-.01830	-.11190	-.09670	.02560	569.30000
1.199	3.054	.19450	.02920	-.03740	-.02840	-.00240	-.01730	-.11480	-.09980	.01990	569.30000
1.196	5.091	.20660	.03170	-.03620	-.02450	.00180	-.01630	-.11720	-.10400	.01940	569.30000
1.197	7.110	.22840	.03330	-.03490	-.02170	.00420	-.01480	-.12350	-.11540	.01800	569.30000
1.201	9.144	.24950	.03430	-.03430	-.02020	.00270	-.01890	-.13080	-.12790	.01700	569.30000
GRADIENT	.00567	.00222	.00018	.00240	.00240	.00155	-.00052	-.00260	-.00203	-.00100	.00000

ARC 11-747 QAS3A B C M F W V NDM. RN/L

08J0311 ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SA.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 20.1024 IN. ZREF = 11.2900 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVOM = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 217/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.62	-5.029	.06370	-.00420	-.03510	-.04330	-.00760	-.02940	-.04250	-.05790	-.05310	484.90000
.65	-2.994	.04150	-.00570	-.03700	-.04280	.00040	-.02050	-.04040	-.06110	-.05890	484.90000
.68	-.905	.00990	-.00550	-.03680	-.04410	.00730	-.01780	-.04310	-.06730	-.05880	484.90000
.69	.017	.10650	-.00610	-.03630	-.04440	.00990	-.01850	-.04530	-.07070	-.05860	484.90000
.698	1.039	.11530	-.00570	-.03670	-.04440	.00990	-.01890	-.04770	-.07620	-.05800	484.90000
.699	3.063	.12810	-.00430	-.03640	-.04280	.01190	-.02090	-.04970	-.08740	-.05630	484.90000
.699	5.090	.13920	-.00400	-.03730	-.04120	.01150	-.02170	-.05260	-.09680	-.05380	484.90000
.699	7.116	.13860	-.00470	-.03680	-.04350	.00310	-.03340	-.06240	-.10370	-.06530	484.90000
.699	9.143	.14780	-.00780	-.03730	-.04510	.00650	-.03750	-.06820	-.11170	-.07500	484.90000
GRADIENT	.00760	.00420	-.00421	-.00421	-.00421	.00184	-.00410	-.00161	-.00435	-.00037	-.00000

RUN NO. 216/ 0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.798	-5.056	.07040	.01720	-.03580	-.01660	-.01250	-.02780	-.04580	-.06470	-.01780	641.30000
.802	-3.020	.00420	.00930	-.03250	-.02320	-.00370	-.02290	-.04450	-.07230	-.02060	641.30000
.798	-.906	.11580	.00470	-.03470	-.02390	.00650	-.01950	-.04820	-.08070	-.02290	641.30000
.797	.030	.12640	.00280	-.03620	-.03330	.01180	-.01760	-.04960	-.08260	-.02390	641.30000
.801	1.055	.13440	.00140	-.03740	-.03590	.01580	-.01760	-.05180	-.08460	-.02130	641.30000
.798	3.090	.14180	.00020	-.03920	-.03910	.01940	-.01730	-.05520	-.08510	-.02170	641.30000
.799	5.134	.13930	-.00270	-.04110	-.04390	.01390	-.01370	-.05660	-.08760	-.01930	641.30000
.797	7.179	.13180	-.00410	-.03910	-.04320	.01540	-.00320	-.05990	-.06570	-.01980	641.30000
.794	9.224	.13830	-.00780	-.03290	-.04070	.01510	-.00160	-.06150	-.06330	-.02660	641.30000
GRADIENT	.00451	-.00150	-.00112	-.00264	-.00386	.00386	.00082	-.00175	-.00208	-.00008	-.00000

RUN NO. 211/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNET	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHFR	Q
.901	-5.061	.07990	.00010	-.03110	-.03100	-.01590	-.03390	-.05010	-.07950	-.07460	614.90000
.903	-3.022	.11280	.00500	-.04040	-.03540	-.00420	-.02860	-.05530	-.09030	-.07570	614.90000
.902	-.909	.13800	-.00380	-.04140	-.04520	.00490	-.02730	-.05980	-.09670	-.07710	614.90000
.900	.028	.14310	-.00640	-.04410	-.05090	.01560	-.02420	-.06170	-.09600	-.07710	614.90000
.902	1.054	.15840	-.00950	-.04340	-.05290	.02180	-.02180	-.06460	-.09360	-.08450	614.90000
.899	3.094	.16050	-.00990	-.04280	-.05270	.02910	-.01690	-.06580	-.08250	-.07420	614.90000
.901	5.136	.15550	-.01170	-.04630	-.05630	.03090	-.00930	-.06700	-.06590	-.07150	614.90000
.904	7.180	.12760	-.02570	-.04680	-.07170	.01430	-.00130	-.06130	-.04430	-.07370	614.90000
.903	9.227	.12600	-.02240	-.04070	-.06300	.01930	-.00130	-.05560	-.05240	-.06400	614.90000
GRADIENT	.00401	-.00247	-.00045	-.00292	-.00353	.00553	.00199	-.00178	-.00129	-.00015	-.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - QMS3A

PAGE 345

ARC 11-747 QMS3A B C M F W V NDN, BN/L

08EJ031) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3510 IN.  
 LREF = 14.2440 IN. WREF = .0025 IN.  
 BREF = 28.1004 IN. WREF = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPOWR = 25.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 210/ 0 BN/L = 3.40 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNE	CNEI	CNEO	CNET	CHUL	CHUL	CHUR	CHLR	CHLF	Q
1.048	-5.046	.13200	-.11780	-.07430	-.19220	.00260	-.00740	-.08740	-.06940	.02510	626.50000
1.055	-5.021	.16540	-.12680	-.07920	-.20580	.01280	.00240	-.07370	-.07350	.02290	626.50000
1.051	-.997	.17250	-.13320	-.08130	-.21590	.01700	.00190	-.07670	-.07740	.02440	626.50000
1.049	.020	.18160	-.13280	-.08270	-.21550	.01940	-.00190	-.08360	-.08050	.02260	626.50000
1.047	1.038	.19480	-.13010	-.08330	-.21330	.02150	-.00260	-.09700	-.08300	.02210	626.50000
1.051	3.078	.20030	-.11640	-.08030	-.19660	.02330	-.00410	-.11820	-.09290	.01980	626.50000
1.046	5.114	.23310	-.12290	-.08020	-.20480	.02430	-.00490	-.12460	-.09710	.02460	626.50000
1.046	7.154	.22560	-.12940	-.08190	-.21130	.02320	-.00430	-.12290	-.08270	.02630	626.50000
1.050	9.194	.22490	-.11620	-.07820	-.19430	.02130	.00340	-.12360	-.07720	.01780	626.50000
GRADIENT		.01000	.00169	-.00234	.00137	.00215	-.00188	-.00757	-.00314	-.00057	.00000

RUN NO. 207/ 0 BN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNE	CNEI	CNEO	CNET	CHUL	CHUL	CHUR	CHLR	CHLF	Q
1.200	-5.041	.13710	-.13270	-.07770	-.21040	-.01420	-.00620	-.08160	-.07590	-.01420	569.50000
1.200	-3.012	.14780	-.13440	-.07940	-.21390	-.01590	-.00440	-.08470	-.08250	-.01720	569.50000
1.194	-.990	.16790	-.11820	-.07920	-.19810	-.01100	-.01740	-.10280	-.09490	-.01180	569.50000
1.195	.024	.18240	-.11620	-.08020	-.19870	-.00720	-.01620	-.10480	-.10100	-.01080	569.50000
1.195	1.035	.19350	-.13240	-.08310	-.21550	-.00400	-.01350	-.10700	-.10410	-.01250	569.50000
1.195	3.078	.20360	-.13410	-.08140	-.21550	.00350	-.00440	-.11070	-.09360	-.01980	569.50000
1.194	5.109	.21100	-.13550	-.08030	-.21590	.00550	-.00440	-.11610	-.09790	-.01120	569.50000
1.200	7.147	.20980	-.13070	-.07920	-.20390	.00420	-.00300	-.11940	-.08580	-.00580	569.50000
1.201	9.140	.22250	-.12690	-.07720	-.20410	.00760	-.00220	-.13070	-.08540	-.00380	569.50000
GRADIENT		.00355	-.00263	-.00249	-.00110	.00295	.00011	-.00355	-.00298	-.00043	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

PAGE 346

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ032) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2900 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 359/ 0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.598	-4.943	.22180	.05560	.02200	.07760	.03700	.00000	-.07360	-.11040	-.01840	479.70000
.598	-2.958	.22510	.05700	.02230	.07920	.03430	-.00210	-.07820	-.11470	-.01980	479.70000
.596	.019	.23790	.05920	.02290	.08170	.03270	-.00290	-.08300	-.12470	-.01950	479.70000
.596	3.101	.24650	.06260	.02300	.08560	.03120	-.00470	-.08720	-.13270	-.01860	479.70000
.601	5.157	.25160	.06450	.02340	.08790	.02550	-.00840	-.09260	-.14190	-.02060	479.70000
.599	6.732	.24720	.06470	.02320	.08790	.01670	-.01640	-.09800	-.14890	-.02260	479.70000
GRADIENT		.00323	.00086	.00012	.00099	-.00068	-.00061	-.00166	-.00285	.00001	-.00000

RUN NO. 259/ 0 RN/L = 4.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.802	-4.964	.00000	.06090	.02490	.08580	.00000	.00000	.00000	.00000	-.00840	646.20000
.799	-2.972	.00000	.06290	.02550	.08840	.00000	.00000	.00000	.00000	-.01030	646.20000
.796	-.980	.00000	.06490	.02570	.09060	.00000	.00000	.00000	.00000	-.00860	646.20000
.801	.016	.00000	.06590	.02560	.09160	.00000	.00000	.00000	.00000	-.00890	646.20000
.796	1.050	.00000	.06700	.02580	.09280	.00000	.00000	.00000	.00000	-.00890	646.20000
.799	3.109	.00000	.06930	.02630	.09560	.00000	.00000	.00000	.00000	-.00880	646.20000
.801	5.176	.00000	.07090	.02650	.09740	.00000	.00000	.00000	.00000	-.01070	646.20000
.799	6.744	.00000	.07200	.02690	.09890	.00000	.00000	.00000	.00000	-.01140	646.20000
GRADIENT		.00000	.00103	.00015	.00119	.00000	.00000	.00000	.00000	.00003	-.00000

RUN NO. 356/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.901	-4.955	.24540	.07050	.02910	.09960	.02430	.00310	-.08570	-.13230	.00030	614.90000
.899	-2.975	.25740	.07810	.03190	.11010	.01870	.00210	-.09840	-.13820	-.00240	614.90000
.902	.017	.26820	.08430	.03330	.11760	.01460	-.00210	-.10570	-.14800	-.00270	614.90000
.899	3.113	.28970	.08780	.03470	.12250	.00450	-.00450	-.10960	-.16210	-.00100	614.90000
.899	5.173	.29240	.09070	.03570	.12640	.01720	-.00740	-.11390	-.16860	-.00240	614.90000
.899	6.703	.28530	.09020	.03540	.12560	.00910	-.01310	-.11700	-.17230	-.00100	614.90000
GRADIENT		.00329	.00209	.00065	.00273	-.00026	-.00093	-.00281	-.00367	-.00012	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

PAGE 347

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ032) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

ALPHA = .000 ELEVON = .000  
 AILERON = .000 BCLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 253/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHFR	Q
1.033	-4.964	.00000	.06160	.04120	.00000	.00000	.00000	.00000	.04660	629.20000
1.053	-2.977	.00000	.06530	.04170	.00000	.00000	.00000	.00000	.04560	629.20000
1.034	-1.985	.00000	.06980	.04040	.00000	.00000	.00000	.00000	.04140	629.20000
1.052	.010	.00000	.07170	.03950	.00000	.00000	.00000	.00000	.05360	629.20000
1.052	1.044	.00000	.07120	.03880	.00000	.00000	.00000	.00000	.05530	629.20000
1.050	3.104	.00000	.07380	.03560	.00000	.00000	.00000	.00000	.05560	629.20000
1.047	5.174	.00000	.08010	.03010	.00000	.00000	.00000	.00000	.04940	629.20000
1.050	6.689	.00000	.08660	.02610	.00000	.00000	.00000	.00000	.04630	629.20000
	GRADIENT	.00000	.00154	-.00069	.00000	.00000	.00000	.00000	.00149	.00000

RUN NO. 354/ 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHFR	Q
1.200	-4.955	.38450	.06670	.02750	.01760	-.00080	-.17920	-.18850	.04210	572.70000
1.202	-2.971	.41240	.07110	.02220	.01950	.00230	-.18950	-.20110	.04280	572.70000
1.201	.011	.43080	.07900	.01590	.02070	.00300	-.19250	-.21470	.04270	572.70000
1.198	3.105	.44300	.08520	.01020	.02000	.00220	-.19530	-.22580	.03770	572.70000
1.199	5.173	.45130	.08810	.00640	.02000	.00330	-.19650	-.23150	.03490	572.70000
1.197	6.687	.45250	.09030	.00540	.01880	.00330	-.19670	-.23370	.03660	572.70000
	GRADIENT	.00695	.00233	-.00213	.00029	.00032	-.00181	-.00454	-.00052	.00000

ARC 11-747 0A53A B C M F W V NOM. RN/L

(BEJ0533) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 ALLRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 263/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHLF	Q
.737	-5.024	.00000	.04250	.00860	.00000	.00000	.00000	.00000	-.02150	484.30000
.796	-3.008	.00000	.04390	.00750	.00000	.00000	.00000	.00000	-.02010	484.30000
.801	-.986	.00000	.04630	.00610	.00000	.00000	.00000	.00000	-.02130	484.30000
.797	.017	.00000	.04690	.00560	.00000	.00000	.00000	.00000	-.02020	484.30000
.798	1.034	.00000	.04830	.00520	.00000	.00000	.00000	.00000	-.02270	484.30000
.798	3.052	.00000	.05110	.00480	.00000	.00000	.00000	.00000	-.02510	484.30000
.799	5.074	.00000	.05410	.00500	.00000	.00000	.00000	.00000	-.02460	484.30000
.799	7.099	.00000	.05670	.00520	.00000	.00000	.00000	.00000	-.02830	484.30000
.800	9.125	.00000	.05880	.00560	.00000	.00000	.00000	.00000	-.03280	484.30000
GRADIENT		.00000	.00117	-.00145	.00000	.00000	.00000	.00000	-.00061	.00000

RUN NO. 265/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHLF	Q
.737	-5.047	.00000	.05230	.00090	.00000	.00000	.00000	.00000	-.00420	640.70000
.796	-3.015	.00000	.05480	.00030	.00000	.00000	.00000	.00000	-.00410	640.70000
.801	-.991	.00000	.05760	.00090	.00000	.00000	.00000	.00000	-.00320	640.70000
.797	.019	.00000	.05690	-.00110	.00000	.00000	.00000	.00000	-.00420	640.70000
.799	1.040	.00000	.05850	-.00280	.00000	.00000	.00000	.00000	-.00400	640.70000
.799	3.063	.00000	.06140	-.00260	.00000	.00000	.00000	.00000	-.00610	640.70000
.796	5.100	.00000	.06520	.00090	.00000	.00000	.00000	.00000	-.00950	640.70000
.797	7.127	.00000	.06720	.00210	.00000	.00000	.00000	.00000	-.00950	640.70000
.800	9.164	.00000	.06890	.00240	.00000	.00000	.00000	.00000	-.01340	640.70000
GRADIENT		.00000	.00102	-.00022	.00000	.00000	.00000	.00000	-.00034	-.00000

RUN NO. 357/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHLF	Q
.737	-5.040	.23330	.07240	.00560	.00520	-.00170	-.00630	-.12350	.02280	616.00000
.796	-3.014	.23310	.07620	.00530	.00270	-.00030	-.00810	-.12660	.02730	616.00000
.801	.023	.24380	.08410	.00570	.00150	-.00050	-.00930	-.13390	.02330	616.00000
.799	3.068	.26180	.09250	.00660	.00240	-.00130	-.00930	-.15770	.02430	616.00000
.799	5.101	.26940	.09440	.00710	.00280	-.00230	-.00930	-.16650	.02430	616.00000
.800	7.132	.26170	.09390	.00790	.00250	-.00260	-.10540	-.17030	.02210	616.00000
GRADIENT		.00439	.00268	.00021	.00028	-.00029	-.00118	-.00511	-.00049	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - QASSA

PAGE 349

ARC 11-747 QASSA B C M F W V NOM. RN/L

(BEJ033) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3510 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 28.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDBRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 254/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHX	CHET	CHEO	CHET	CHUL	CHUL	CHUR	CHLR	CHLF	Q
1.051	-5.044	.00000	.00710	-.02895	-.02130	.00000	.00000	.00000	.00000	.05940	628.70000
1.051	-3.012	.00000	.01290	-.03030	-.01730	.00000	.00000	.00000	.00000	.05910	628.70000
1.053	-1.000	.00000	.02190	-.02920	-.00730	.00000	.00000	.00000	.00000	.05750	628.70000
1.052	.018	.00000	.02440	-.02980	-.00540	.00000	.00000	.00000	.00000	.05600	628.70000
1.052	1.028	.00000	.02490	-.02990	-.00500	.00000	.00000	.00000	.00000	.05180	628.70000
1.050	3.061	.00000	.03420	-.02850	.00570	.00000	.00000	.00000	.00000	.05370	628.70000
1.049	5.087	.00000	.03620	-.02680	.00350	.00000	.00000	.00000	.00000	.05250	628.70000
1.048	7.117	.00000	.04030	-.02620	.01420	.00000	.00000	.00000	.00000	.05220	628.70000
1.050	9.149	.00000	.04660	-.02520	.02140	.00000	.00000	.00000	.00000	.04620	628.70000
GRADIENT		.00000	.00330	.00223	.00352	.00000	.00000	.00000	.00000	-.00108	-.00000

RUN NO. 251/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHX	CHET	CHEO	CHET	CHUL	CHUL	CHUR	CHLR	CHLF	Q
1.199	-5.035	.00000	.00330	-.03640	-.04570	.00000	.00000	.00000	.00000	.01830	569.50000
1.200	-3.011	.00000	.00560	-.03840	-.04400	.00000	.00000	.00000	.00000	.01840	569.50000
1.201	-.991	.00000	.00370	-.03800	-.03730	.00000	.00000	.00000	.00000	.01620	569.50000
1.204	.016	.00000	.00240	-.03790	-.03560	.00000	.00000	.00000	.00000	.01480	569.50000
1.204	1.029	.00000	.00330	-.03810	-.03480	.00000	.00000	.00000	.00000	.01320	569.50000
1.203	3.054	.00000	.00690	-.03730	-.03400	.00000	.00000	.00000	.00000	.01230	569.50000
1.206	5.084	.00000	.01020	-.03590	-.02570	.00000	.00000	.00000	.00000	.01500	569.50000
1.196	7.112	.00000	.01200	-.03460	-.02260	.00000	.00000	.00000	.00000	.01640	569.50000
1.196	9.135	.00000	.01430	-.03390	-.01360	.00000	.00000	.00000	.00000	.01550	569.50000
GRADIENT		.00000	.00198	.00216	.00214	.00000	.00000	.00000	.00000	-.00105	-.00000

DATE 06 JUL 74 TABULATED SOURCE DATA - 0453A

ARC 11-747 0453A B C M F W V NOM. RN/L (0EJ034) (12 MAR 74)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

PARAMETRIC DATA

RUN NO. 361/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHEO	CHLL	CHUL	CHUR	CHLR	CHER	Q
.597	-5.013	.25410	-.01290	-.03100	-.04350	.02630	.00270	-.06310	-.05930	-.10590	-.05750	476.50000
.599	-2.998	.21940	-.01010	-.03370	-.04380	.03080	.00810	-.06850	-.11200	-.11200	-.06250	476.50000
.599	.012	.24170	-.00720	-.03680	-.04400	.03390	.00720	-.07410	-.12640	-.12640	-.06160	476.50000
.597	3.058	.24580	-.00580	-.03620	-.04200	.02670	-.00250	-.07750	-.14400	-.14400	-.05820	476.50000
.597	5.081	.23550	-.00420	-.03510	-.03930	.02700	-.00740	-.08080	-.15310	-.15310	-.05510	476.50000
.598	7.116	.24390	-.00610	-.03490	-.04100	.00920	-.02420	-.09180	-.16720	-.16720	-.06470	476.50000
GRADIENT		.00435	.00071	-.00041	.00030	-.00268	-.00175	-.00149	-.00529	.00071		.00000

RUN NO. 261/0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHEO	CHLL	CHUL	CHUR	CHLR	CHER	Q
.799	-5.060	.00000	.01720	-.03440	-.01720	.00000	.00000	.00000	.00000	.00000	-.02520	642.10000
.797	-3.022	.00000	.00970	-.03180	-.02210	.00000	.00000	.00000	.00000	.00000	-.02580	642.10000
.799	-.985	.00000	.00500	-.03230	-.02750	.00000	.00000	.00000	.00000	.00000	-.02640	642.10000
.798	.022	.00000	.00420	-.03510	-.03080	.00000	.00000	.00000	.00000	.00000	-.02790	642.10000
.799	1.046	.00000	.00240	-.03610	-.03370	.00000	.00000	.00000	.00000	.00000	-.02610	642.10000
.798	3.091	.00000	.00010	-.03810	-.03800	.00000	.00000	.00000	.00000	.00000	-.02540	642.10000
.798	5.131	.00000	-.00290	-.04040	-.04330	.00000	.00000	.00000	.00000	.00000	-.02460	642.10000
.798	7.173	.00000	-.00270	-.03840	-.04110	.00000	.00000	.00000	.00000	.00000	-.02420	642.10000
.799	9.226	.00000	-.00720	-.03250	-.03970	.00000	.00000	.00000	.00000	.00000	-.03040	642.10000
GRADIENT		.00000	-.00154	-.00111	-.00266	.00000	.00000	.00000	.00000	.00000	.00007	-.00000

RUN NO. 358/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHEO	CHLL	CHUL	CHUR	CHLR	CHER	Q
.902	-5.071	.22780	-.00010	-.02870	-.02890	.02390	-.01280	-.08080	-.12390	-.12390	-.07600	616.30000
.900	-3.035	.27510	.00010	-.03950	-.03540	.03000	.00530	-.08910	-.15060	-.15060	.07750	616.30000
.901	.017	.28070	-.00090	-.04070	-.04160	.02060	.00450	-.09590	-.16000	-.16000	.07000	616.30000
.903	3.086	.27320	-.01030	-.04230	-.05270	.01860	.00280	-.10530	-.14640	-.14640	.07440	616.30000
.902	5.129	.25100	-.01030	-.04310	-.05980	.01950	.00770	-.10780	-.11590	-.11590	.07460	616.30000
.899	7.181	.20680	-.01670	-.04190	-.06010	.01760	.01740	-.09880	-.07500	-.07500	.06450	616.30000
GRADIENT		-.00031	-.00235	-.00046	-.00283	-.00186	-.00041	-.00265	.00069	.00069		.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V NOM. RN/L

QBEJ034) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 255/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.050	-5.050	.00000	-.11790	-.07470	.00000	.00000	.00000	.00000	.02250	628.40000
1.053	-3.024	.00000	-.12580	-.07900	.00000	.00000	.00000	.00000	.02330	628.40000
1.050	-1.004	.00000	-.13650	-.07970	.00000	.00000	.00000	.00000	.02000	628.40000
1.052	.015	.00000	-.12960	-.08220	.00000	.00000	.00000	.00000	.01970	628.40000
1.050	1.036	.00000	-.12240	-.08070	.00000	.00000	.00000	.00000	.02180	628.40000
1.047	3.072	.00000	-.11260	-.08320	.00000	.00000	.00000	.00000	.02060	628.40000
1.046	5.115	.00000	-.12410	-.08150	.00000	.00000	.00000	.00000	.02820	628.40000
1.058	7.158	.00000	-.12550	-.07990	.00000	.00000	.00000	.00000	.02260	628.40000
1.050	9.198	.00000	-.10880	-.07520	.00000	.00000	.00000	.00000	.01660	628.40000
GRADIENT		.00000	.00265	-.00023	.00000	.00000	.00000	.00000	-.00031	.00000

RUN NO. 355/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.199	-5.041	.33150	-.13050	-.07180	.02000	.00940	-.14940	-.15270	-.01540	573.10000
1.201	-3.020	.35210	-.12320	-.07420	.02000	.01260	-.15420	-.16530	-.01510	573.10000
1.197	.014	.37940	-.13110	-.07650	.02100	.00720	-.16180	-.18950	-.01120	573.10000
1.197	3.074	.38390	-.13130	-.07860	.02000	.00530	-.16550	-.19310	-.01880	573.10000
1.198	5.111	.36630	-.12850	-.07660	.02310	.00310	-.16570	-.17440	-.01120	573.10000
1.198	7.152	.33130	-.12460	-.07520	.02000	.00830	-.16270	-.14020	-.00670	573.10000
GRADIENT		.00321	-.00133	-.00072	-.00000	-.00120	-.00185	-.00456	-.00061	.00000

ARC 11-747 OA33A B C H F W V NOM. RN/L

(BEJ035) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3515 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 29.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 ALLORN = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 277/0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHUR	CHLR	CHFR	Q
.596	-4.934	.06930	.05430	.02230	.07660	-.04930	-.08210	-.11860	-.02260	477.90000
.598	-2.933	.08760	.05660	.02280	.07960	-.04820	-.07440	-.11860	-.02320	477.90000
.601	-.964	.09590	.05860	.02290	.08150	-.04430	-.06670	-.12430	-.02210	477.90000
.598	.022	.10310	.05920	.02300	.08230	-.04310	-.06970	-.12750	-.02220	477.90000
.598	1.050	.10740	.05970	.02320	.08290	-.04230	-.06920	-.12910	-.02130	477.90000
.595	3.108	.11950	.06170	.02360	.08530	-.04120	-.06820	-.13490	-.02090	477.90000
.597	5.164	.12950	.06340	.02350	.08680	-.04380	-.07120	-.14470	-.02240	477.90000
.597	6.703	.14170	.06390	.02390	.08780	-.03400	-.07540	-.14940	-.02370	477.90000
GRADIENT		.00638	.00088	.00015	.00103	.00101	.00167	-.00216	.00026	.00000

RUN NO. 274/0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHUR	CHLR	CHFR	Q
.800	-4.934	.07410	.06020	.02490	.08510	-.04370	-.08220	-.12450	-.01200	639.60000
.796	-2.961	.08680	.06310	.02570	.08880	-.04740	-.07620	-.12360	-.01170	639.60000
.797	-.972	.10550	.06540	.02620	.09160	-.04660	-.07390	-.13340	-.01030	639.60000
.798	.025	.11190	.06620	.02610	.09240	-.04560	-.07230	-.13520	-.01010	639.60000
.795	1.058	.11920	.06740	.02620	.09360	-.04440	-.07100	-.13860	-.00970	639.60000
.800	3.121	.13020	.06960	.02670	.09630	-.04290	-.06980	-.14380	-.00910	639.60000
.799	5.180	.14150	.07060	.02670	.09740	-.04470	-.07250	-.15420	-.01060	639.60000
.797	6.733	.15590	.07220	.02710	.09930	-.03420	-.07710	-.15910	-.01190	639.60000
GRADIENT		.00718	.00114	.00020	.00135	.00282	.00150	-.00266	.00039	.00000

RUN NO. 271/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHUR	CHLR	CHFR	Q
.901	-4.934	.06910	.07030	.03080	.10030	-.05660	-.08680	-.12690	-.00330	615.40000
.902	-2.961	.08920	.07870	.03310	.11170	-.05350	-.08260	-.13110	-.00420	615.40000
.902	-.972	.10460	.08500	.03500	.12000	-.05450	-.07940	-.13800	-.00590	615.40000
.901	.024	.11270	.08390	.03460	.11850	-.05380	-.07810	-.14150	-.00390	615.40000
.899	1.058	.11910	.08250	.03430	.11650	-.05290	-.07680	-.14450	-.00280	615.40000
.900	3.117	.13250	.08950	.03670	.12620	-.05270	-.07730	-.15410	-.00300	615.40000
.900	5.179	.14980	.09120	.03750	.12870	-.05180	-.08000	-.16510	-.00230	615.40000
.900	6.658	.16470	.09150	.03730	.12890	-.04120	-.08240	-.16940	-.00200	615.40000
GRADIENT		.00781	.00210	.00071	.00282	.00041	.00125	-.00311	.00013	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C M F W V NON. RN/L

(0EJ035) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 268/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE	CHEI	CHEO	CHEZ	CHUL	CHUL	CHUR	CHUR	CHUR	CHUR	Q
1.051	-4.953	.09390	.06120	.04110	.10230	-1.1330	-1.0980	-1.1490	-1.17620	.05580	.05580	628.70000
1.054	-2.963	.12280	.06430	.04120	.10550	-1.1050	-1.0300	-1.1480	-1.18240	.04410	.04410	628.70000
1.055	-.970	.13790	.06910	.04050	.10960	-1.0370	-1.0310	-1.1510	-1.19280	.04270	.04270	628.70000
1.053	.024	.14500	.07150	.03940	.11090	-1.1020	-1.0140	-1.1540	-1.19450	.05400	.05400	628.70000
1.050	1.058	.14970	.07100	.03880	.10980	-1.10100	-1.0980	-1.15560	-1.19480	.05370	.05370	628.70000
1.050	3.116	.16500	.07550	.03560	.11100	-1.0980	-1.0980	-1.15930	-1.20310	.05510	.05510	628.70000
1.050	5.179	.18350	.07870	.03010	.10880	-1.09620	-1.09520	-1.16480	-1.21010	.05280	.05280	628.70000
1.051	6.828	.20980	.08850	.02610	.11450	-1.08530	-1.09400	-1.17250	-1.21670	.04840	.04840	628.70000
	GRADIENT	.00844	.00178	-.00066	.00112	.00167	.00124	-.00221	-.00331	.00048	.00048	-.00000

RUN NO. 265/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHE	CHEI	CHEO	CHEZ	CHUL	CHUL	CHUR	CHUR	CHUR	CHUR	Q
1.200	-4.947	.09780	.06580	.02770	.09340	-1.12970	-1.11860	-1.16610	-1.17990	.04110	.04110	571.00000
1.197	-2.960	.13020	.07040	.02250	.09300	-1.12480	-1.1320	-1.17310	-1.19510	.04490	.04490	571.00000
1.199	-.972	.15350	.07600	.01780	.09370	-1.12130	-1.10870	-1.17660	-1.20690	.04600	.04600	571.00000
1.198	.025	.16560	.07820	.01540	.09360	-1.11850	-1.10510	-1.17850	-1.21070	.04750	.04750	571.00000
1.199	1.058	.17720	.08000	.01330	.09350	-1.11540	-1.10060	-1.18010	-1.21320	.04490	.04490	571.00000
1.199	3.111	.19880	.08430	.00920	.09350	-1.11050	-1.09590	-1.18410	-1.22110	.04150	.04150	571.00000
1.199	5.175	.22360	.08740	.00640	.09380	-1.10230	-1.08990	-1.18920	-1.22680	.03890	.03890	571.00000
1.200	6.749	.24150	.08920	.00440	.09360	-1.09370	-1.08610	-1.19360	-1.22770	.03480	.03480	571.00000
	GRADIENT	.01240	.00233	-.00230	.00203	.00237	.00287	-.00214	-.00504	.00011	.00011	-.00000

ARC 11-747 QAS3A B C M F W3 V NCM. RN/L

(BEJ36) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT.      WARP = 32.3015 IN.  
LREF = 14.2445 IN.      WARP = .0000 IN.  
BREF = 28.1004 IN.      WARP = 11.2500 IN.  
SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA =	10.000	ELEVON =	.000
AIRLEN =	.000	BSFLAP =	-11.700
SPDRK =	\$5.000	RUDDER =	-10.000
ELEV-L =	.000	ELEV-R =	.000

RUN NO. 278 / 5 RN/L = 3.97 GRADIENT INTERVAL = -5.00 / 5.00

WACH	BETA	CAR	CHEI	CHEO	CHEI	CHLL	CHUR	CHUR	CHOF	Q
.537	-5.017	.05340	.04250	.00080	.05110	-.05170	-.02900	-.11820	-.02440	478.50000
.539	-2.995	.07100	.04410	.00780	.05190	-.04680	-.08020	-.11360	-.02370	478.50000
.536	-.985	.08920	.04600	.00620	.05220	-.04600	-.07590	-.12420	-.02290	478.50000
.537	.026	.06330	.04720	.00580	.05310	-.04430	-.08470	-.12620	-.02200	478.50000
.538	1.034	.09810	.04850	.00540	.05380	-.04390	-.07200	-.12840	-.02290	478.50000
.539	3.056	.11040	.05160	.00470	.05630	-.04280	-.07140	-.08360	-.02530	478.50000
.539	5.083	.11830	.05420	.00320	.05940	-.04480	-.07150	-.09200	-.02660	478.50000
.538	7.105	.13550	.05650	.00320	.06170	-.05320	-.06470	-.14080	-.02370	478.50000
.536	9.124	.14930	.05920	.00370	.06470	-.05330	-.06470	-.14210	-.03250	478.50000
GRADIENT		.02650	.00124	-.00250	.00073	.00100	.00147	-.00153	-.00028	.00000

Run No.	275 / G	RM/L =	4.22	GRADIENT INTERVAL =	-5.00 / 5.00
1	100	100	100	100	100
2	100	100	100	100	100
3	100	100	100	100	100
4	100	100	100	100	100
5	100	100	100	100	100
6	100	100	100	100	100
7	100	100	100	100	100
8	100	100	100	100	100
9	100	100	100	100	100
10	100	100	100	100	100
11	100	100	100	100	100
12	100	100	100	100	100
13	100	100	100	100	100
14	100	100	100	100	100
15	100	100	100	100	100
16	100	100	100	100	100
17	100	100	100	100	100
18	100	100	100	100	100
19	100	100	100	100	100
20	100	100	100	100	100
21	100	100	100	100	100
22	100	100	100	100	100
23	100	100	100	100	100
24	100	100	100	100	100
25	100	100	100	100	100
26	100	100	100	100	100
27	100	100	100	100	100
28	100	100	100	100	100
29	100	100	100	100	100
30	100	100	100	100	100
31	100	100	100	100	100
32	100	100	100	100	100
33	100	100	100	100	100
34	100	100	100	100	100
35	100	100	100	100	100
36	100	100	100	100	100
37	100	100	100	100	100
38	100	100	100	100	100
39	100	100	100	100	100
40	100	100	100	100	100
41	100	100	100	100	100
42	100	100	100	100	100
43	100	100	100	100	100
44	100	100	100	100	100
45	100	100	100	100	100
46	100	100	100	100	100
47	100	100	100	100	100
48	100	100	100	100	100
49	100	100	100	100	100
50	100	100	100	100	100
51	100	100	100	100	100
52	100	100	100	100	100
53	100	100	100	100	100
54	100	100	100	100	100
55	100	100	100	100	100
56	100	100	100	100	100
57	100	100	100	100	100
58	100	100	100	100	100
59	100	100	100	100	100
60	100	100	100	100	100
61	100	100	100	100	100
62	100	100	100	100	100
63	100	100	100	100	100
64	100	100	100	100	100
65	100	100	100	100	100
66	100	100	100	100	100
67	100	100	100	100	100

	BETA	CNR	CH1	CH2D	CH2T	CHUL	CHLL	CHUR	CHLR	CHCF	Q
WACH											
.799	-5.038	.06010	.05210	.00090	.05300	-.05170	-.03120	-.06180	-.12120	-.00650	639.10000
.798	-3.009	.07570	.05430	.00000	.05460	-.04930	-.02600	-.08250	-.12520	-.09770	639.10000
.800	-.906	.09460	.05730	.00130	.05860	-.04670	-.07840	-.08660	-.13310	-.00570	639.10000
.802	.027	.10240	.05680	.00260	.05620	-.04630	-.07770	-.08900	-.13140	-.00430	639.10000
.805	1.048	.11110	.05830	-.00280	.05750	-.04580	-.07580	-.09110	-.14160	-.00670	639.10000
.797	3.073	.12520	.06100	-.00070	.05630	-.04400	-.07130	-.09450	-.14610	-.00670	639.10000
.805	5.111	.13530	.06150	.00150	.06680	-.03680	-.07210	-.09770	-.15460	-.00610	639.10000
.798	7.137	.15020	.06660	.00180	.06840	-.03300	-.07200	-.09790	-.15710	-.00840	639.10000
.796	9.166	.17380	.06890	.00220	.07110	-.01540	-.06050	-.09840	-.15430	-.01440	639.10000
GRADIENT		.00814	.00104	-.00025	.00079	.00083	.00180	-.00200	.00022	-.00000	

RUN NO. 272/ J      RM/L = 3.74      GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CHEI	CHEO	CHEI	CHUL	CHUL	CHUR	CHLR	CHBF	Q
.902	-5.032	.05456	.07010	.00580	.07590	-.05940	-.05940	-.08870	-.12470	.02110	615.40000
.899	-3.009	.07080	.07080	.00610	.08410	-.05470	-.08860	-.08880	-.12540	.02060	615.40000
.898	-.984	.09110	.08410	.00690	.09110	-.05160	-.08190	-.09190	-.13270	.01960	615.40000
.898	.025	.09380	.08380	.00510	.08890	-.05210	-.07960	-.09350	-.13810	.02420	615.40000
.899	1.043	.11440	.08580	.00540	.09120	-.04970	-.07550	-.09610	-.14300	.02110	615.40000
.900	3.078	.13310	.09260	.00670	.09930	-.04700	-.07170	-.09920	-.15280	.02080	615.40000
.898	5.105	.14370	.09420	.00730	.10150	-.04970	-.07270	-.10260	-.16350	.02250	615.40000
.900	7.136	.16370	.09400	.00730	.10130	-.03440	-.06970	-.10060	-.16730	.02270	615.40000
.898	9.169	.18610	.09170	.00930	.10100	-.01730	-.06000	-.09740	-.16610	.01960	615.40000
.GRADIENT		.01034	.00224	.00002	.00225	.00123	.00281	-.00174	-.00452	.00000	

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TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A R Y F M V NOM. RN/L

(BEJ036) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.4000 IN.  
 LREF = 14.2440 IN. YMRP = .0070 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVOM = .000  
 AIRLON = .000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 269/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.051	-5.028	.06620	.00720	-.02860	-.02140	-.09870	-.09750	-.12440	-.13800	.05390	629.20000
1.053	-5.009	.09970	.01190	-.03040	-.01860	-.09420	-.07970	-.12620	-.14740	.05750	629.20000
1.053	-.988	.13470	.02100	-.03010	-.00910	-.08580	-.07600	-.13450	-.16200	.05600	629.20000
1.052	.023	.15100	.02350	-.03020	-.02670	-.08270	-.07340	-.13740	-.16980	.05300	629.20000
1.053	1.032	.16510	.02480	-.03020	-.02530	-.07960	-.07080	-.13940	-.17610	.05260	629.20000
1.053	3.069	.18430	.03100	-.02830	-.02270	-.07500	-.06880	-.14270	-.18530	.05200	629.20000
1.052	5.085	.20370	.03580	-.02700	-.02080	-.06960	-.06610	-.14510	-.19420	.05190	629.20000
1.050	7.112	.21710	.03880	-.02620	-.01260	-.06730	-.06830	-.14920	-.20360	.05100	629.20000
1.049	9.140	.23150	.04680	-.02600	-.02080	-.03510	-.05560	-.14120	-.20110	.04710	629.20000
GRADIENT		.01403	.00302	.00031	.00334	.00315	.00187	-.00268	-.00631	-.00098	-.00000

RUN NO. 266/0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.200	-5.028	.11190	-.00920	-.03660	-.04590	-.09800	-.08150	-.14530	-.14600	.01430	571.00000
1.201	-3.013	.13090	-.00510	-.03830	-.04350	-.09460	-.08070	-.14880	-.15670	.01690	571.00000
1.198	-.987	.15210	.00230	-.03820	-.03790	-.09190	-.08330	-.15420	-.17310	.01590	571.00000
1.201	.026	.16320	.00180	-.03820	-.03640	-.09060	-.08140	-.15620	-.17890	.01750	571.00000
1.201	1.041	.17170	.00340	-.03790	-.03450	-.08890	-.07850	-.15730	-.18190	.01660	571.00000
1.202	3.063	.18770	.00660	-.03740	-.03080	-.08520	-.07520	-.15960	-.18860	.01430	571.00000
1.198	5.088	.20890	.01010	-.03620	-.02610	-.07960	-.06800	-.16260	-.19390	.01430	571.00000
1.197	7.117	.23870	.01150	-.03470	-.02320	-.06790	-.06430	-.16700	-.20400	.01640	571.00000
1.197	9.146	.26200	.01270	-.03440	-.02170	-.05870	-.06520	-.17170	-.21420	.01320	571.00000
GRADIENT		.00938	.00189	.00015	.00205	.00154	.00095	-.00175	-.00516	-.00055	-.00000

ARC 11-747 Q453A B C N F M V NOM. RN/L

(BE 037) (12 MAR 74)

## REFERENCE DATA

SCEF = 2.4210 SQ.FT. ZNEP = 32.3010 IN.  
 LREF = 14.2440 IN. YNEP = .0000 IN.  
 BREF = 20.1004 IN. ZNEP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRCON = .000 BDPLAP = -11.700  
 SPDSRK = 55.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 279/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.598	-5.007	.04680	-.00920	-.03450	-.04370	-.05370	-.09920	-.07960	-.12000	-.06120	480.20000
.597	-2.994	.06420	-.00770	-.03660	-.04430	-.04840	-.08410	-.07480	-.12190	-.06460	480.20000
.596	-.982	.08590	-.00770	-.03770	-.04540	-.04450	-.07560	-.07730	-.12880	-.06530	480.20000
.597	.024	.09740	-.00800	-.03840	-.04640	-.04290	-.07430	-.07950	-.13500	-.06690	480.20000
.598	1.037	.10690	-.00720	-.03940	-.04630	-.04120	-.07280	-.08060	-.14030	-.06740	480.20000
.597	3.070	.12220	-.00590	-.03860	-.04430	-.03990	-.07290	-.08340	-.15170	-.06140	480.20000
.599	5.092	.13000	-.00530	-.03690	-.04230	-.04840	-.07620	-.09210	-.16250	-.06040	480.20000
.598	7.122	.14330	-.00640	-.03640	-.04280	-.04660	-.08180	-.10170	-.17000	-.06990	480.20000
.597	9.144	.16660	-.00810	-.03710	-.04520	-.02870	-.07500	-.09890	-.17140	-.08140	480.20000
GRADIENT		.00965	.00229	-.00038	-.00008	.00142	.00180	-.00144	-.00499	.00038	-.00000

RUN NO. 276/0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.799	-5.053	.06350	.01690	-.03340	-.01850	-.06260	-.08670	-.08470	-.12820	-.02270	639.10000
.801	-3.015	.07600	.01020	-.03250	-.02230	-.05390	-.08780	-.08130	-.13730	-.02490	639.10000
.798	-.982	.09810	.00530	-.03350	-.02820	-.04840	-.08320	-.08370	-.14600	-.02780	639.10000
.802	.030	.10550	.00420	-.03560	-.03130	-.04670	-.08320	-.08690	-.15150	-.02630	639.10000
.798	1.054	.11460	.00270	-.03670	-.03480	-.04540	-.08440	-.08910	-.15530	-.02750	639.10000
.798	3.093	.12160	.00020	-.03680	-.03650	-.04020	-.08000	-.09070	-.15120	-.02760	639.10000
.799	5.137	.12250	-.00260	-.04150	-.04410	-.04040	-.06960	-.09400	-.13650	-.02390	639.10000
.802	7.175	.12420	-.00410	-.03940	-.04360	-.03520	-.05400	-.09670	-.11680	-.02610	639.10000
.800	9.219	.15560	-.00930	-.03190	-.04140	-.01350	-.03070	-.09500	-.10930	-.02870	639.10000
GRADIENT		.00751	-.00164	-.00109	-.00271	.00217	.00119	-.00165	-.00250	-.00038	-.00000

RUN NO. 275/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.801	-5.058	.07870	.00120	-.03240	-.03110	-.06950	-.07160	-.08520	-.13350	-.06870	615.50000
.800	-3.023	.08850	.00690	-.04060	-.03370	-.06500	-.08540	-.08990	-.14690	-.06980	615.50000
.802	-.987	.10220	-.00290	-.04010	-.04300	-.06160	-.09320	-.09510	-.15680	-.07330	615.50000
.800	.030	.10440	-.00430	-.04160	-.04590	-.05780	-.09440	-.09690	-.15980	-.07430	615.50000
.800	1.056	.10600	-.00590	-.04160	-.04750	-.05490	-.09360	-.09870	-.15590	-.07200	615.50000
.800	3.099	.10590	-.01140	-.04340	-.05480	-.05150	-.08910	-.10330	-.14220	-.07120	615.50000
.807	5.137	.10400	-.01820	-.04520	-.06340	-.04490	-.07550	-.10690	-.11780	-.06870	615.50000
.804	7.182	.09220	-.02180	-.04520	-.06700	-.03130	-.05560	-.10000	-.07910	-.06320	615.50000
.802	9.226	.12140	-.02150	-.03970	-.06020	-.00570	-.04120	-.09120	-.07710	-.05520	615.50000
GRADIENT		.00279	-.00284	-.00049	-.00332	.00226	-.00056	-.00222	-.00114	.00114	-.00000

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TABULATED SOURCE DATA - OMSSA

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AFC 11-747 OMSSA B C M F W V NOM. RN/L

(0EJ537) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. WREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 26.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 275/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.051	-5.045	.00195	-1.1560	-0.07450	-1.9010	-1.1140	-0.07230	-1.2330	-1.14220	.02295	628.60000
1.049	-5.015	.11720	-1.1200	-0.07800	-1.9060	-1.09280	-0.03770	-1.2330	-1.14440	.02620	628.60000
1.052	-.994	.14730	-1.1330	-0.07990	-2.1320	-0.07840	-0.06080	-1.3060	-1.15590	.02160	628.60000
1.049	.022	.17060	-1.1290	-0.08240	-2.1320	-0.07180	-0.06510	-1.3810	-1.16940	.02010	628.60000
1.049	1.045	.18710	-1.1210	-0.08260	-2.0130	-0.06840	-0.06300	-1.4140	-1.17710	.02180	628.60000
1.047	3.081	.20310	-1.1140	-0.08020	-1.9430	-0.06270	-0.06130	-1.4740	-1.17980	.02110	628.60000
1.048	5.123	.19190	-1.1250	-0.08170	-2.0740	-0.05790	-0.05970	-1.5030	-1.1920	.02500	628.60000
1.048	7.157	.18040	-1.1270	-0.08080	-2.1400	-0.04870	-0.04950	-1.5300	-1.12490	.01990	628.60000
1.045	9.201	.18360	-1.1010	-0.07640	-1.8660	-0.03590	-0.04790	-1.5430	-1.1320	.01510	628.60000
GRADIENT	.01463	.00156	-.00033	-.000123	.00123	.00493	-.00264	-.00409	-.00827	-.00074	-.00000

RUN NO. 287/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CME	CHEI	CHEO	CNET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.199	-5.033	.10220	-1.1200	-0.07740	-2.0940	-1.0490	-0.07290	-1.3860	-1.14140	-.01270	570.10000
1.203	-5.019	.12560	-1.1310	-0.07870	-2.0930	-0.09200	-.06950	-1.3940	-1.14770	-.01840	570.10000
1.198	-.998	.14790	-1.1240	-0.07940	-1.9980	-0.08420	-0.07200	-1.4170	-1.16170	-.01430	570.10000
1.197	.018	.16270	-1.1260	-0.08110	-2.0750	-0.08310	-0.07150	-1.4540	-1.17190	-.01200	570.10000
1.195	1.044	.18170	-1.1290	-0.08260	-2.1250	-0.08260	-0.06720	-1.4870	-1.18030	-.01350	570.10000
1.192	3.077	.20590	-1.1310	-0.08170	-2.1370	-0.07140	-.06290	-1.5500	-1.18520	-.01760	570.10000
1.194	5.111	.20270	-1.1360	-0.08240	-2.1650	-0.06280	-.05890	-1.5640	-1.16890	-.01080	570.10000
1.198	7.145	.19070	-1.1310	-0.07930	-2.1020	-0.06220	-.05350	-1.6220	-1.14190	-.00520	570.10000
1.200	9.188	.20310	-1.1270	-0.07730	-2.0480	-0.05290	-.05360	-1.7180	-1.13790	-.00430	570.10000
GRADIENT	.01354	.00256	-.00030	-.000128	.00128	.00325	-.00121	-.00265	-.00645	.00016	.00000

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TABULATED SOURCE DATA - QM33A

ARC 11-747 QM33A B C M F W V NOM. RN/L

(0EJ538) (12 MAR 74 )

REFERENCE DATA

SECF = 2.4210 SQ.FT. XMEP = 32.3510 IN.  
 LREF = 14.2440 IN. YMEP = .0000 IN.  
 BREF = 24.1724 IN. ZMEP = 11.2500 IN.  
 SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILRON = .0000 BDFLAP = -11.700  
 SPBRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO 251/0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CME	CME1	CHEO	CHE2	CHLL	CHUR	CHLR	CHCF	Q
.594	-.651	.00000	.05940	.02340	.08280	.00000	.00000	.00000	-.03180	479.70000
.600	-.591	.00000	.05950	.02330	.08280	.00000	.00000	.00000	-.03180	479.70000
.605	3.044	.00000	.05940	.02240	.08180	.00000	.00000	.00000	-.02920	479.70000
.597	6.085	.00000	.05690	.01660	.07350	.00000	.00000	.00000	-.02770	479.70000
.596	9.094	.00000	.05100	.00860	.05960	.00000	.00000	.00000	-.02920	479.70000
.601	12.120	.00000	.04110	.00240	.04350	.00000	.00000	.00000	-.03370	479.70000
.514	15.180	.00000	.02740	-.01630	.01110	.00000	.00000	.00000	-.04410	479.70000
.516	18.260	.00000	-.00050	-.02810	-.02460	.00000	.00000	.00000	-.06400	479.70000
.537	21.240	.00000	-.00480	-.04160	-.04540	.00000	.00000	.00000	-.07650	479.70000
.534	24.260	.00000	-.01790	-.04130	-.05910	.00000	.00000	.00000	-.08210	479.70000
.534	27.210	.00000	-.03020	-.02660	-.05660	.00000	.00000	.00000	-.07780	479.70000
GRADIENT		.00000	-.00001	-.00028	-.00029	.00000	.00000	.00000	.00074	.00000

RUN NO. 197/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CME	CME1	CHEO	CHE2	CHLL	CHUR	CHLR	CHCF	Q
.794	-.656	.00000	.06670	.02590	.09260	.00000	.00000	.00000	-.01690	638.10000
.794	-.102	.00000	.06710	.02640	.09390	.00000	.00000	.00000	-.01610	638.10000
.799	3.045	.00000	.07000	.02840	.09840	.00000	.00000	.00000	-.01440	638.10000
.800	6.085	.00000	.07030	.02210	.09240	.00000	.00000	.00000	-.01070	638.10000
.800	9.084	.00000	.06150	.00410	.06560	.00000	.00000	.00000	-.01130	638.10000
.801	12.110	.00000	.04980	-.00460	.04520	.00000	.00000	.00000	-.01390	638.10000
.802	15.190	.00000	.02560	-.01310	.01290	.00000	.00000	.00000	-.02960	638.10000
.799	18.230	.00000	.01440	-.03140	-.01340	.00000	.00000	.00000	-.03530	638.10000
.799	21.240	.00000	-.00330	-.03330	-.03640	.00000	.00000	.00000	-.03390	638.10000
.796	24.240	.00000	-.01430	-.02460	-.04290	.00000	.00000	.00000	-.03790	638.10000
.801	27.200	.00000	-.03230	-.02660	-.05890	.00000	.00000	.00000	-.02770	638.10000
GRADIENT		.00000	.00091	.00067	.00158	.00000	.00000	.00000	.00064	.00000

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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NOM. RN/L

(08J030) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 20.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AILERON = .0000 BDFLAP = -11.700  
 SPDRK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 193/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CME	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.933	-1.651	.00000	.00690	.03540	.12220	.00000	.00000	.00000	.00000	-.01060	617.60000
.934	-1.100	.00000	.00760	.03510	.12300	.00000	.00000	.00000	.00000	-.01230	617.60000
.935	3.116	.00000	.00990	.03720	.12700	.00000	.00000	.00000	.00000	-.00800	617.60000
.931	6.121	.00000	.09310	.02560	.11870	.00000	.00000	.00000	.00000	-.00280	617.60000
.932	9.120	.00000	.09530	.01040	.10570	.00000	.00000	.00000	.00000	.01450	617.60000
.930	12.150	.00000	.05910	-.00200	.08710	.00000	.00000	.00000	.00000	.01800	617.60000
.937	15.140	.00000	.01460	-.01940	-.09520	.00000	.00000	.00000	.00000	.02790	617.60000
.932	18.240	.00000	.00270	-.03640	-.03370	.00000	.00000	.00000	.00000	.05900	617.60000
.939	21.230	.00000	-.01180	-.04300	-.05480	.00000	.00000	.00000	.00000	.07520	617.60000
.937	24.330	.00000	-.04100	-.02990	-.07090	.00000	.00000	.00000	.00000	.06400	617.60000
.939	27.220	.00000	-.05590	-.03550	-.09150	.00000	.00000	.00000	.00000	.05320	617.60000
GRADIENT		.00000	.00279	.00254	.00129	.00000	.00000	.00000	.00000	.00094	.00000

RUN NO. 189/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CME	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
1.054	-1.619	.00000	.07540	.04130	.11680	.00000	.00000	.00000	.00000	.01060	629.90000
1.050	.069	.00000	.06910	.04020	.10930	.00000	.00000	.00000	.00000	.01350	629.90000
1.051	3.076	.00000	.05880	.02250	.08130	.00000	.00000	.00000	.00000	.06310	629.90000
1.053	6.051	.00000	.04510	-.00280	.04230	.00000	.00000	.00000	.00000	.06030	629.90000
1.049	9.041	.00000	.03280	-.02190	.01090	.00000	.00000	.00000	.00000	.06000	629.90000
1.051	12.100	.00000	-.01160	-.04150	-.05310	.00000	.00000	.00000	.00000	.05020	629.90000
1.050	15.160	.00000	-.06300	-.05520	-.11820	.00000	.00000	.00000	.00000	.04510	629.90000
1.052	18.230	.00000	-.04860	-.06860	-.15720	.00000	.00000	.00000	.00000	.03280	629.90000
1.048	21.230	.00000	-.10940	-.08190	-.19120	.00000	.00000	.00000	.00000	.00270	629.90000
1.048	24.240	.00000	-.11690	-.08060	-.19750	.00000	.00000	.00000	.00000	-.00270	629.90000
1.050	27.210	.00000	-.13810	-.07540	-.21350	.00000	.00000	.00000	.00000	-.01230	629.90000
GRADIENT		.00000	-.00417	-.00553	-.00952	.00000	.00000	.00000	.00000	.01490	.00000

ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ038) (12 MAR 74)

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = .000 BDELAP = -11.700  
 SPDBRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 185 / 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	ALPHA	CHP	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.202	-1.627	.00000	.08430	.01990	.10420	.00000	.00000	.00000	.00000	.04840	570.50000
1.201	.069	.00000	.07930	.01550	.09480	.00000	.00000	.00000	.00000	.04820	570.50000
1.203	3.061	.00000	.05610	-.00300	.03310	.00000	.00000	.00000	.00000	.03550	570.50000
1.203	5.054	.00000	.04190	-.01170	.03020	.00000	.00000	.00000	.00000	.03100	570.50000
1.198	6.048	.00000	.03710	-.01760	.01950	.00000	.00000	.00000	.00000	.02920	570.50000
1.197	9.065	.00000	.01360	-.03320	-.01970	.00000	.00000	.00000	.00000	.02080	570.50000
1.195	12.080	.00000	-.02150	-.04380	-.06530	.00000	.00000	.00000	.00000	.01060	570.50000
1.197	15.160	.00000	-.07140	-.05750	-.12900	.00000	.00000	.00000	.00000	.00000	570.50000
1.199	18.220	.00000	-.11020	-.07280	-.18310	.00000	.00000	.00000	.00000	-.00750	570.50000
1.196	21.210	.00000	-.12610	-.08420	-.21030	.00000	.00000	.00000	.00000	-.01680	570.50000
1.195	24.260	.00000	-.14830	-.08690	-.23510	.00000	.00000	.00000	.00000	-.04190	570.50000
1.196	27.170	.00000	-.16970	-.09680	-.26580	.00000	.00000	.00000	.00000	-.05490	570.50000
GRADIENT		.00000	-.00768	-.00620	-.01388	.00000	.00000	.00000	.00000	-.00372	.00000





DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F M V NOM. RN/L

(BEJ039) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = .000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 345/ 0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.599	-4.936	.03040	.05330	.02190	.10390	.15430	.09360	.13430	.03350	481.40000
.598	-2.945	.01630	.05530	.02230	.09990	.14610	.09590	.13370	.03350	481.40000
.597	.030	.00050	.05820	.02230	.09710	.14150	.09840	.13970	.03210	481.40000
.597	3.111	.01940	.06100	.02300	.09500	.13720	.10190	.14980	.03200	481.40000
.598	5.168	.03230	.06310	.02300	.09340	.13920	.10620	.15870	.03190	481.40000
.600	6.800	.05440	.06350	.02340	.09740	.13890	.10690	.16120	.03130	481.40000
GRADIENT		.00608	.00096	.00012	.00106	.00201	.00101	.00200	.00022	-1.00000

RUN NO. 198/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-4.947	.00000	.06230	.02520	.00000	.00000	.00000	.00000	.01880	640.80000
.800	-2.959	.00000	.06400	.02600	.00000	.00000	.00000	.00000	.01770	640.80000
.797	-.972	.00000	.06690	.02640	.00000	.00000	.00000	.00000	.01700	640.80000
.797	.029	.00000	.06820	.02650	.00000	.00000	.00000	.00000	.01690	640.80000
.798	1.065	.00000	.06870	.02650	.00000	.00000	.00000	.00000	.01690	640.80000
.799	3.124	.00000	.07060	.02710	.00000	.00000	.00000	.00000	.01640	640.80000
.799	5.186	.00000	.07270	.02740	.00000	.00000	.00000	.00000	.01520	640.80000
.800	6.771	.00000	.07380	.02760	.00000	.00000	.00000	.00000	.01500	640.80000
GRADIENT		.00000	.00104	.00021	.00000	.00000	.00000	.00000	.00028	-1.00000

RUN NO. 340/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHEO	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.900	-4.947	.04150	.07490	.03110	.11840	.17260	.09660	.15290	.00640	605.90000
.904	-2.961	.01760	.08450	.03410	.11810	.16750	.11550	.15240	.01060	605.90000
.902	.028	.00190	.08740	.03470	.11540	.15840	.11510	.15670	.00910	605.90000
.901	3.124	.01420	.09100	.03620	.11630	.15870	.11980	.16940	.00810	605.90000
.900	5.181	.03610	.09340	.03710	.10030	.15750	.12010	.17380	.00660	605.90000
.900	6.718	.06740	.09380	.03750	.07540	.15580	.12050	.17810	.00540	605.90000
GRADIENT		.00659	.00181	.00056	.00033	.00183	.00239	.00205	.00009	-1.00000

PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
AILEON = .0000 BDFLAP = -11.7000  
SPDRK = 85.0000 RUDDER = .0000  
ELEV-L = .0000 ELEV-R = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
LREF = 14.2440 IN. YMRP = .0000 IN.  
BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
SCALE = .0000 SCALE

RUN NO. 195/ 0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.052	-4.953	.00000	.06180	.04110	.10290	.00000	.00000	.00000	.00000	.05260	628.90000
1.053	-2.962	.00000	.06520	.04170	.10690	.00000	.00000	.00000	.00000	.02940	628.90000
1.053	-.971	.00000	.06980	.04090	.11070	.00000	.00000	.00000	.00000	.01780	628.90000
1.053	.025	.00000	.07160	.04020	.11160	.00000	.00000	.00000	.00000	.01680	628.90000
1.053	1.065	.00000	.07230	.03870	.11100	.00000	.00000	.00000	.00000	.03670	628.90000
1.052	3.122	.00000	.07120	.03490	.10810	.00000	.00000	.00000	.00000	.04690	628.90000
1.052	5.185	.00000	.07770	.03040	.10820	.00000	.00000	.00000	.00000	.05170	628.90000
1.053	6.715	.00000	.08780	.02630	.11410	.00000	.00000	.00000	.00000	.04910	628.90000
GRADIENT		.00000	.00132	-.00074	.00058	.00000	.00000	.00000	.00000	-.00052	.00000

RUN NO. 343/ 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.201	-4.945	.00320	.06400	.02740	.09150	.17980	.23910	.17620	.21050	.03810	573.20000
1.201	-2.956	.00780	.06860	.02230	.09100	.17890	.23330	.16840	.21600	.04280	573.20000
1.201	.028	.00570	.07680	.01520	.09210	.17990	.22800	.16850	.22520	.04610	573.20000
1.196	3.120	.01880	.08380	.01060	.09440	.18020	.22010	.16870	.23030	.04430	573.20000
1.204	5.178	.03980	.08610	.00610	.09210	.17460	.21820	.19340	.23930	.04010	573.20000
1.201	6.794	.07060	.08860	.00440	.09300	.17800	.21250	.19750	.24350	.03710	573.20000
GRADIENT		.00599	.00249	-.000210	.00038	-.00009	.00228	-.00129	-.00251	.00076	-.00000

DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM. RN/L

(BEJ000) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SJ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1104 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AIRRM = .000 BDFLAP = -11.700  
 SPDRK = .000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 203/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.599	-5.030	.00000	.04340	.00680	.05230	.00000	.00000	.00000	.00000	-.03160	481.40000
.597	-2.993	.00000	.04490	.00800	.05280	.00000	.00000	.00000	.00000	-.03100	481.40000
.597	-.981	.00000	.04690	.00600	.05370	.00000	.00000	.00000	.00000	-.03000	481.40000
.599	.031	.00000	.04800	.00640	.05440	.00000	.00000	.00000	.00000	-.03160	481.40000
.600	1.039	.00000	.04910	.00570	.05490	.00000	.00000	.00000	.00000	-.03150	481.40000
.598	3.066	.00000	.05200	.00550	.05740	.00000	.00000	.00000	.00000	-.03260	481.40000
.597	5.081	.00000	.05550	.00560	.06100	.00000	.00000	.00000	.00000	-.03290	481.40000
.597	7.110	.00000	.05690	.00600	.06300	.00000	.00000	.00000	.00000	-.03360	481.40000
.595	9.132	.00000	.06010	.00640	.06660	.00000	.00000	.00000	.00000	-.03370	481.40000
GRADIENT		.00000	.00116	-.00243	.00074	.00000	.00000	.00000	.00000	-.00031	-.00000

RUN NO. 199/ 0 RN/L = 4.22 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.799	-5.034	.00000	.05480	.00220	.05700	.00000	.00000	.00000	.00000	-.01170	639.80000
.799	-3.031	.00000	.05620	.00110	.05730	.00000	.00000	.00000	.00000	-.01380	639.80000
.798	-.979	.00000	.05890	.00180	.06760	.00000	.00000	.00000	.00000	-.01120	639.80000
.800	.033	.00000	.05820	.00210	.06830	.00000	.00000	.00000	.00000	-.01390	639.80000
.799	1.048	.00000	.06010	.00230	.06740	.00000	.00000	.00000	.00000	-.01140	639.80000
.797	3.072	.00000	.06380	.00300	.06410	.00000	.00000	.00000	.00000	-.01380	639.80000
.800	5.103	.00000	.06680	.00150	.06200	.00000	.00000	.00000	.00000	-.01440	639.80000
.799	7.130	.00000	.06820	.00240	.07160	.00000	.00000	.00000	.00000	-.01430	639.80000
.800	9.171	.00000	.06940	.00240	.07120	.00000	.00000	.00000	.00000	-.02150	639.80000
GRADIENT		.00000	.00118	-.00019	.00100	.00000	.00000	.00000	.00000	.00002	.00000

RUN NO. 341/ 0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHEF	Q
.902	-5.031	-.04600	.07530	.00700	.08290	-.11970	-.18600	-.11010	-.14360	.01710	607.20000
.900	-3.007	-.02960	.07860	.00530	.08490	-.11350	-.17390	-.11000	-.14770	.02130	607.20000
.902	.030	-.00280	.08590	.00610	.09200	-.10850	-.15870	-.10860	-.15560	.01640	607.20000
.900	3.078	.02620	.09280	.00610	.09660	-.10830	-.15020	-.11370	-.17170	.02170	607.20000
.898	5.103	.04170	.09500	.00750	.10250	-.10860	-.15270	-.11930	-.16370	.01790	607.20000
.902	7.137	.06670	.09420	.00780	.10200	-.10870	-.15070	-.11670	-.16940	.02180	607.20000
GRADIENT		.00317	.00230	.00013	.00243	.00065	.00389	-.00049	-.00394	-.00002	.00000

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ040) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 10.000  
 AIRLON = .000  
 SPDRK = 85.000  
 ELEV-L = .000  
 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 191/0 RN/L = 3.50 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHL	CHL	CHL	CHUR	CHLR	CHEF	Q
1.050	-5.033	.00000	.00870	-.02780	-.01920	.00000	.00000	.00000	.00000	.00000	.05390	628.40000
1.051	-3.056	.00000	.01420	-.02980	-.01560	.00000	.00000	.00000	.00000	.00000	.05840	628.40000
1.049	-.984	.00000	.02330	-.02880	-.00550	.00000	.00000	.00000	.00000	.00000	.05830	628.40000
1.050	.028	.00000	.02680	-.02890	-.00210	.00000	.00000	.00000	.00000	.00000	.06150	628.40000
1.052	1.038	.00000	.02670	-.02920	-.00230	.00000	.00000	.00000	.00000	.00000	.05950	628.40000
1.049	3.068	.00000	.03520	-.02770	.00750	.00000	.00000	.00000	.00000	.00000	.05760	628.40000
1.047	5.103	.00000	.03890	-.02580	.01320	.00000	.00000	.00000	.00000	.00000	.05720	628.40000
1.050	7.132	.00000	.04150	-.02530	.01620	.00000	.00000	.00000	.00000	.00000	.05510	628.40000
1.048	9.154	.00000	.04340	-.02540	.01790	.00000	.00000	.00000	.00000	.00000	.05010	628.40000
GRADIENT		.00000	.00328	.00029	.00357	.00000	.00000	.00000	.00000	.00000	-.00006	-.00000

RUN NO. 187/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHL	CHL	CHL	CHUR	CHLR	CHEF	Q
1.202	-5.026	.00000	-.00840	-.03610	-.04450	.00000	.00000	.00000	.00000	.00000	.01480	573.60000
1.198	-3.051	.00000	-.00410	-.03780	-.04190	.00000	.00000	.00000	.00000	.00000	.01580	573.60000
1.199	-.981	.00000	.00180	-.03770	-.03580	.00000	.00000	.00000	.00000	.00000	.01740	573.60000
1.199	.032	.00000	.00390	-.03730	-.03340	.00000	.00000	.00000	.00000	.00000	.01650	573.60000
1.201	1.043	.00000	.00440	-.03760	-.03320	.00000	.00000	.00000	.00000	.00000	.01560	573.60000
1.202	3.068	.00000	.00790	-.03750	-.02960	.00000	.00000	.00000	.00000	.00000	.01470	573.60000
1.197	5.093	.00000	.01190	-.03590	-.02450	.00000	.00000	.00000	.00000	.00000	.01550	573.60000
1.200	7.122	.00000	.01200	-.03480	-.02280	.00000	.00000	.00000	.00000	.00000	.01470	573.60000
1.201	9.147	.00000	.01370	-.03410	-.02040	.00000	.00000	.00000	.00000	.00000	.01220	573.60000
GRADIENT		.00000	.00191	.00005	.00195	.00000	.00000	.00000	.00000	.00000	-.00025	-.00000



ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ041) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = 20.000 ELEVON = .000  
 AILRON = .000 BDFAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 346/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.599	-5.001	-0.0360	-0.0124	-0.0340	-0.0450	-0.0360	-0.0040	-0.0090	-0.1460	-0.0920	479.70000
.599	-2.968	-0.0310	-0.0090	-0.0360	-0.0460	-0.0970	-0.1690	-0.0920	-0.1440	-0.0930	479.70000
.598	.027	-0.0160	-0.0030	-0.0370	-0.0470	-0.0920	-0.1530	-0.0940	-0.1530	-0.0730	479.70000
.597	3.068	-0.0280	-0.0060	-0.0380	-0.0470	-0.0910	-0.1480	-0.0930	-0.1710	-0.0660	479.70000
.600	5.094	-0.0370	-0.0040	-0.0360	-0.0410	-0.0970	-0.1500	-0.1070	-0.1810	-0.0650	479.70000
.598	7.120	-0.0670	-0.0070	-0.0360	-0.0430	-0.0940	-0.1550	-0.1140	-0.1920	-0.0730	479.70000
GRADIENT		.00089	.00050	-0.0028	.00022	.00104	.00351	-0.0098	-0.00438	.00050	.00000

RUN NO. 200/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.797	-5.043	-0.0220	-0.0180	-0.0340	-0.0160	-0.0000	-0.0000	-0.0000	-0.0000	-0.0260	638.30000
.799	-3.021	-0.0000	-0.0120	-0.0330	-0.0160	-0.0000	-0.0000	-0.0000	-0.0000	-0.0320	638.30000
.796	-.985	-0.0000	-0.0070	-0.0350	-0.0270	-0.0000	-0.0000	-0.0000	-0.0000	-0.0340	638.30000
.799	.032	-0.0000	-0.0020	-0.0360	-0.0290	-0.0000	-0.0000	-0.0000	-0.0000	-0.0360	638.30000
.800	1.061	-0.0000	-0.0020	-0.0390	-0.0270	-0.0000	-0.0000	-0.0000	-0.0000	-0.0360	638.30000
.798	3.091	-0.0000	-0.0010	-0.0410	-0.0320	-0.0000	-0.0000	-0.0000	-0.0000	-0.0350	638.30000
.799	5.130	-0.0000	-0.0010	-0.0390	-0.0320	-0.0000	-0.0000	-0.0000	-0.0000	-0.0320	638.30000
.800	7.182	-0.0000	-0.0030	-0.0370	-0.0400	-0.0000	-0.0000	-0.0000	-0.0000	-0.0370	638.30000
.803	9.226	-0.0000	-0.0070	-0.0360	-0.0400	-0.0000	-0.0000	-0.0000	-0.0000	-0.0370	638.30000
GRADIENT		.00000	-0.0010	-0.0008	-0.0026	.00000	.00000	.00000	.00000	-0.0059	-0.00000

RUN NO. 342/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.898	-5.056	-0.0030	-0.0240	-0.0370	-0.0310	-0.1170	-0.1280	-0.1020	-0.1550	-0.0710	610.40000
.903	-3.024	-0.0020	-0.0240	-0.0440	-0.0420	-0.1130	-0.1670	-0.1060	-0.1710	-0.0720	610.40000
.901	.030	-0.0010	-0.0030	-0.0440	-0.0470	-0.1040	-0.1790	-0.1090	-0.1730	-0.0520	610.40000
.901	3.105	-0.0000	-0.0110	-0.0450	-0.0670	-0.1010	-0.1720	-0.1190	-0.1580	-0.0630	610.40000
.903	5.138	-0.0010	-0.0170	-0.0460	-0.0670	-0.0990	-0.1590	-0.1250	-0.1320	-0.0680	610.40000
.900	7.188	-0.0070	-0.0200	-0.0430	-0.0640	-0.0780	-0.1300	-0.1050	-0.0950	-0.0620	610.40000
GRADIENT		.00096	-0.0027	-0.0013	-0.0023	.00188	-0.0091	-0.00212	.00214	-0.00083	.00000

## PARAMETRIC DATA

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NDM. RN/L

(0EJ041) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AILERON = .000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 192/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.051	-5.042	.000000	-111690	-07470	-19170	.000000	.000000	.000000	.000000	.022000	628.300000
1.051	-3.021	.000000	-123300	-07810	-20140	.000000	.000000	.000000	.000000	.026000	628.300000
1.051	-0.970	.000000	-124800	-07910	-20390	.000000	.000000	.000000	.000000	.026200	628.300000
1.050	.023	.000000	-122800	-07900	-20180	.000000	.000000	.000000	.000000	.025500	628.300000
1.046	1.043	.000000	-121200	-07930	-20060	.000000	.000000	.000000	.000000	.021400	628.300000
1.046	3.090	.000000	-110600	-07870	-18930	.000000	.000000	.000000	.000000	.020200	628.300000
1.046	5.146	.000000	-114000	-07970	-19370	.000000	.000000	.000000	.000000	.026300	628.300000
1.050	7.171	.000000	-125900	-08050	-20640	.000000	.000000	.000000	.000000	.018300	628.300000
1.046	9.199	.000000	-112000	-07670	-18880	.000000	.000000	.000000	.000000	.014000	628.300000
	GRADIENT	.000000	.002000	.000000	.001900	.000000	.000000	.000000	.000000	.001100	.000000

RUN NO. 344/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.200	-5.033	.001410	-128100	-07350	-20170	-16420	-17410	-15500	-16920	-014000	573.200000
1.204	-3.013	.002640	-120700	-07670	-19750	-11950	-19870	-15360	-17810	-015400	573.200000
1.202	.027	.001800	-124200	-08010	-20430	-15110	-19690	-15490	-19490	-012700	573.200000
1.199	3.082	.003440	-130600	-08060	-21120	-14630	-17330	-16180	-19820	-017500	573.200000
1.198	5.116	.003340	-128400	-07860	-20700	-14510	-16760	-16890	-17760	-013700	573.200000
1.203	7.157	.003360	-124300	-07680	-20100	-13980	-15340	-17520	-15180	-010600	573.200000
	GRADIENT	.000990	.000162	.000664	.000225	.000217	.000319	.000135	.000330	.000035	.000000

DATE 06 JUL 74

## TABULATED SOURCE DATA - OASJA

PAGE 367

ARC 11-747 OASJA B C M F W V NOM. RN/L

(BEJ043) (12 MAR 74)

## REFERENCE DATA

SHEF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 24.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0020 ELEVON = .0000  
 AIRLON = 15.0000 BDFLAP = -11.7000  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = -15.0000

RUN NO. 289/0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNR	CNET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.599	-.644	.00380	.15830	.07150	.22980	-.02210	-.04180	-.02420	-.04340	.00020	480.80000
.599	.109	.00270	.15820	.07070	.22890	-.02200	-.04220	-.02350	-.04340	-.00050	480.80000
.599	1.109	.00280	.15790	.06940	.22730	-.02200	-.04200	-.02330	-.04340	.00150	480.80000
.599	1.614	.00360	.15590	.06790	.22370	-.02190	-.04070	-.02330	-.04280	.00200	480.80000
.598	3.597	.00460	.15680	.06470	.22140	-.02140	-.04140	-.02370	-.04370	.00250	480.80000
.598	5.562	.00430	.15100	.06200	.21120	-.02130	-.04160	-.02360	-.04250	.00300	480.80000
.599	7.634	.00460	.14910	.05640	.20350	-.02050	-.04160	-.02300	-.04270	.00300	480.80000
.599	9.605	.00630	.14700	.05220	.19920	-.02030	-.04050	-.02490	-.04310	.00130	480.80000
.599	12.630	.00760	.13950	.03710	.17660	-.01960	-.03940	-.02310	-.04330	-.00620	480.80000
.600	15.690	.00660	.12940	.02290	.15230	-.02010	-.04040	-.02310	-.04390	-.01450	480.80000
.599	18.720	.00760	.10690	.01550	.12240	-.02120	-.04010	-.02460	-.04420	-.02750	480.80000
.600	21.720	.00640	.10070	.01080	.11160	-.02370	-.04240	-.02630	-.04620	-.03390	480.80000
.599	24.730	.00400	.08170	.00280	.08450	-.02850	-.04780	-.03010	-.05020	-.03710	480.80000
.600	28.720	.00380	.07360	.01300	.08670	-.04290	-.06170	-.04150	-.05930	-.04620	480.80000
GRADIENT		.00229	-.00049	-.00165	-.00211	.00206	.00018	.00008	-.00024	.00068	.00000

RUN NO. 288/0 RN/L = 4.23 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CNR	CNET	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.798	-.664	.00390	.18970	.08460	.27430	-.02220	-.04400	-.02350	-.04690	.00030	641.20000
.798	.079	.00390	.19100	.08360	.27470	-.02180	-.04460	-.02340	-.04690	.00040	641.20000
.800	1.111	.00360	.18830	.08130	.26970	-.02170	-.04400	-.02330	-.04610	.00080	641.20000
.798	1.614	.00370	.18700	.07990	.26690	-.02180	-.04360	-.02320	-.04580	.00030	641.20000
.797	3.568	.00450	.18430	.07680	.26110	-.02120	-.04280	-.02310	-.04550	.00070	641.20000
.798	5.570	.00490	.18160	.07160	.25220	-.02090	-.04270	-.02290	-.04560	.00060	641.20000
.800	7.626	.00540	.17380	.05700	.23080	-.02080	-.04260	-.02310	-.04570	.00000	641.20000
.799	9.612	.00500	.17510	.05390	.21460	-.02090	-.04330	-.02310	-.04610	.01040	641.20000
.799	12.630	.00520	.16360	.02600	.18960	-.02150	-.04330	-.02340	-.04650	.00160	641.20000
.797	15.700	.00550	.13950	.02120	.15970	-.02300	-.04340	-.02590	-.04840	-.00130	641.20000
.801	18.770	.00450	.13750	.01900	.15630	-.02600	-.05140	-.02880	-.05210	.00210	641.20000
.799	21.770	-.00190	.13210	.02830	.16040	-.03150	-.05830	-.03270	-.05210	.00210	641.20000
.799	24.740	-.00710	.13000	.03000	.16800	-.03380	-.06690	-.04060	-.05690	.00260	641.20000
.799	28.690	-.01110	.11380	.04030	.15410	-.04600	-.06780	-.04710	-.05560	.00270	641.20000
GRADIENT		.00020	-.00150	-.00190	-.00341	.00021	.00048	.00010	-.00037	.00006	.00000

ARC 11-747 0453A B C M F W V NDM. RN/L

(BEJ043) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AIRLON = 15.000 BDELAP = -11.700  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = -15.000

RUN NO. 287/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.900	-1.669	.00490	.24370	.10960	.35340	-.02920	-.04790	-.02990	-.05200	.02300	614.60000
.901	-.068	.00460	.24660	.10800	.35450	-.02880	-.04820	-.02940	-.05230	.02640	614.60000
.902	1.125	.00490	.24100	.10200	.34300	-.02820	-.04770	-.02890	-.05200	.02680	614.60000
.900	1.612	.00490	.23960	.09890	.33850	-.02760	-.04740	-.02840	-.05150	.02700	614.60000
.904	3.545	.00470	.23420	.08160	.31580	-.02670	-.04720	-.02770	-.05100	.02940	614.60000
.899	5.569	.00480	.22280	.06200	.28480	-.02470	-.04510	-.02590	-.04870	.02670	614.60000
.903	7.601	.00510	.22480	.04200	.26670	-.02530	-.04530	-.02640	-.04940	.03070	614.60000
.902	9.616	.00400	.21660	.02900	.24760	-.02600	-.04540	-.02700	-.04850	.03690	614.60000
.899	12.610	.00200	.17920	.02500	.20420	-.02650	-.04740	-.02710	-.04870	.04080	614.60000
.902	15.680	.00270	.16260	.02790	.19040	-.02890	-.05180	-.03040	-.05300	.03470	614.60000
.899	18.770	-.00200	.15900	.02920	.18620	-.03660	-.06050	-.03680	-.05830	.07490	614.60000
.901	21.770	-.00430	.14920	.02780	.17700	-.04820	-.06640	-.04590	-.06240	.08840	614.60000
.900	24.720	.00090	.12640	.04210	.16850	-.06280	-.05720	-.06220	-.05870	.07610	614.60000
.900	28.670	-.00750	.09670	.03700	.13370	-.07130	-.05570	-.06860	-.05100	.06710	614.60000
GRADIENT		-.00202	-.00268	-.00678	-.00947	.00061	.00022	.00052	.00028	.00131	.00000

RUN NO. 286/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.051	-.657	.02010	.31350	.12450	.43810	-.07760	-.07640	-.08670	-.08740	.06860	627.60000
1.050	.056	.01880	.31840	.11740	.42580	-.07700	-.07630	-.08540	-.08660	.07060	627.60000
1.050	1.091	.01820	.30120	.10260	.40370	-.07580	-.07590	-.08420	-.08570	.07200	627.60000
1.049	1.597	.01790	.30040	.09080	.39120	-.07520	-.07570	-.08350	-.08530	.07250	627.60000
1.050	3.571	.01540	.29020	.06650	.35680	-.07310	-.07420	-.07960	-.08310	.07560	627.60000
1.052	5.529	.02300	.28120	.04440	.32560	-.07060	-.07170	-.07990	-.08340	.07440	627.60000
1.052	7.609	.02760	.26430	.03430	.29850	-.06520	-.06640	-.07600	-.08330	.07450	627.60000
1.051	9.569	.03820	.24010	.03060	.27070	-.05860	-.06200	-.07660	-.08220	.07180	627.60000
1.050	12.590	.04620	.20200	.02210	.22400	-.04710	-.05340	-.07560	-.07110	.06550	627.60000
1.049	15.650	.01880	.16560	.01560	.18130	-.04070	-.04630	-.05520	-.05060	.06130	627.60000
1.048	18.700	.00210	.13130	.00130	.13260	-.04180	-.04360	-.04450	-.04300	.04700	627.60000
1.049	21.710	-.00880	.08660	-.00990	.07670	-.05460	-.05490	-.04990	-.04310	.01710	627.60000
1.052	24.750	-.00860	.05120	-.00310	.04810	-.05820	-.07270	-.05970	-.06660	.00200	627.60000
1.050	28.670	-.04420	.01170	-.00030	.01230	-.06810	-.05400	-.05330	-.06800	-.02420	627.60000
GRADIENT		-.00105	-.00541	-.01412	-.01953	.00108	.00053	.00164	.00100	.00158	.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - QMS3A

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ARC 11-747 QMS3A B C H F W V NOM. RN/L

(BEJ043) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3515 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1054 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = .000  
 AILRON = 15.000 BDFLAP = -11.700  
 SPBRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = -15.000

RUN NO. 285/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.05/ 5.00

MACH	ALPHA	CHX	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.201	-0.664	.02700	.30110	.07000	.37190	-.07510	-.06070	-.08440	-.07830	.04930	568.20000
1.199	-.058	.02810	.29520	.06490	.36710	-.07330	-.06040	-.08400	-.07780	.05100	568.20000
1.201	1.077	.02360	.28790	.05220	.34010	-.07150	-.05910	-.08110	-.07320	.04980	568.20000
1.202	1.586	.02430	.28550	.04830	.33380	-.07000	-.05870	-.08020	-.07230	.04940	568.20000
1.198	3.537	.01230	.27540	.03330	.30870	-.06720	-.05640	-.07220	-.06370	.04660	568.20000
1.199	5.526	.00240	.25730	.02960	.28690	-.06450	-.05530	-.06380	-.05840	.04240	568.20000
1.199	7.585	-.00100	.23120	.02850	.25960	-.06250	-.05470	-.06000	-.05620	.03750	568.20000
1.201	9.567	-.00290	.20800	.02020	.22820	-.06050	-.05460	-.05750	-.05470	.03340	568.20000
1.201	12.590	-.00300	.17760	.01400	.19160	-.05930	-.05460	-.05690	-.05400	.02460	568.20000
1.198	15.660	-.00240	.14420	.00370	.11790	-.06260	-.05690	-.06140	-.05770	.01220	568.20000
1.199	18.710	.00100	.07150	-.01040	.06110	-.06680	-.06090	-.06600	-.06270	-.00230	568.20000
1.199	21.710	.00150	.03890	-.02050	.01840	-.06540	-.05650	-.06480	-.05860	-.01810	568.20000
1.200	24.680	.00360	.00370	-.02120	-.01750	-.07000	-.05360	-.06760	-.05950	-.04000	568.20000
1.198	28.660	-.04360	-.03010	-.02800	-.05810	-.09450	-.06420	-.07030	-.04090	-.05780	568.20000
	GRADIENT	-.00365	-.00604	-.00908	-.01512	-.00187	.00106	.00298	.00358	-.00080	.00000

AFC 11-747 JA53A B C M F M V NCM. RM/L

(BEJ46) (26 JUN 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT.      XMEP = 32.3015 IN.  
LREF = 14.2440 IN.      YMEP = .0200 IN.  
BREF = 20.1554 IN.      ZMEP = 11.2500 IN.  
SCALE = .0300 SCALE

ALPHA =  
AILRON =  
SFCEK =  
ELEV-L =

RUN NO. 247 / 5 RM/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

WACH	BETA	CNR	CMT1	CMT0	CNET	CML	CHLL	CHUR	CHLR	CHBF	Q
.600	-5.004	.03620	-.004890	-.03340	-.04270	-.06740	-.13270	-.13960	-.16370	-.07540	482.600000
.598	-2.992	.03110	-.00660	-.03640	-.04310	-.06280	-.14230	-.10630	-.17000	-.07220	482.600000
.599	-.980	.03720	-.00650	-.03770	-.04420	-.07970	-.13160	-.10710	-.17640	-.07560	482.600000
.597	.023	.08240	-.00680	-.03810	-.04490	-.07770	-.12770	-.10740	-.18000	-.07620	482.600000
.599	1.042	.09390	-.00660	-.03900	-.04560	-.07590	-.12900	-.10680	-.18620	-.07650	482.600000
.599	3.069	.11640	-.00570	-.03790	-.04360	-.07600	-.12090	-.11100	-.19200	-.06920	482.600000
.597	5.994	.11420	-.00490	-.03790	-.04220	-.06890	-.12820	-.12250	-.20890	-.06970	482.600000
.599	7.117	.12520	-.00650	-.03630	-.04280	-.06500	-.12770	-.12570	-.21200	-.07760	482.600000
.600	9.149	.13520	-.00770	-.03620	-.04460	-.05840	-.11680	-.11840	-.21200	-.08690	482.600000
	GRADIENT	.00928	-.00013	-.00029	-.00014	-.00120	-.00350	-.00077	-.00378	-.00036	

RUN NO. 244 / 0  $\bar{R}N/L = 4.22$  GRADIENT INTERVAL = -5.00 / 5.00

WACH	BETA	CMR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	J
.798	-4.947	.05245	.06250	.02535	.06780	-.08810	-.13460	-.10490	-.17110	-.01945	641.10000
.799	-2.963	.07610	.06480	.02570	.09460	-.06430	-.12570	-.11650	-.17810	-.01920	641.10000
.799	-.969	.08935	.06680	.02635	.09310	-.08160	-.12380	-.11940	-.17530	-.01665	641.10000
.800	.027	.09400	.06840	.02640	.09480	-.08160	-.12330	-.12060	-.17830	-.01700	641.10000
.802	1.062	.10935	.06875	.02650	.09520	-.08100	-.12080	-.12170	-.18030	-.01620	641.10000
.797	3.120	.10910	.07160	.02670	.09740	-.08410	-.11880	-.12510	-.16700	-.01740	641.10000
.798	5.183	.12370	.07230	.02700	.09930	-.07770	-.11700	-.12640	-.19160	-.01780	641.10000
.801	6.846	.14920	.07400	.02740	.10150	-.05570	-.11770	-.12730	-.19370	-.01760	641.10000
GRADIENT	-.0685		.09101	.02708	.09120	.09054	.09169	-.00236	-.01208	-.00035	.00000

RUN NO. 241 / 0    RM/L = 3.76    GRADIENT INTERVAL = -5.00 / 5.00

WACH	BETA	CMR	CM1	CM2	CM3	CHL	CHL1	CHL2	CHL3	CHL4	CHL5	Q
9.940	-4.995	1.04495	0.7335	0.3225	0.1160	-0.09305	-1.1680	-1.0360	-1.1000	-0.1270	621.20000	
9.99	-2.361	0.7250	0.7850	0.3170	0.1020	-0.09460	-1.1690	-1.2580	-1.1710	-0.0580	621.20000	
9.901	-0.969	0.65805	0.68305	0.33505	0.11730	-0.09270	-1.1320	-1.2930	-1.1810	-0.0770	621.20000	
9.942	0.023	0.99750	0.6650	0.3420	0.12070	-0.09290	-1.1190	-1.3400	-1.1670	-0.0760	621.20000	
9.901	1.161	0.9710	0.6870	0.3410	0.11970	-0.09300	-1.1290	-1.3160	-1.1870	-0.0770	621.20000	
9.942	3.120	1.0490	0.9180	0.3600	0.12760	-0.09650	-1.2940	-1.3480	-1.3590	-0.1740	621.20000	
9.901	5.105	1.2560	0.9950	0.3710	0.12960	-0.09250	-1.2960	-1.3600	-2.0060	-0.67	621.20000	
9.999	6.715	1.5260	0.9160	0.3710	0.12870	-0.06170	-1.2870	-1.3680	-2.2200	-0.33	621.20000	
	GEACENT	0.0721	0.0162	0.0055	0.0211	-0.0036	0.0213	-0.0281	-0.034	-0.01	621.20000	

DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A 6 C M F W V NNM. RN/L

(BEJ546) ( 26 JUN 74 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = .0000 ELEVON = .0000  
 AIRLON = .0000 SDFLAP = -11.7000  
 SPDRK = 85.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

## PARAMETRIC DATA

RUN NO. 233/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHU	CHLL	CHUR	CHLR	CHEF	Q
1.043	-4.954	.03920	.06160	.04160	.10320	-.1180	-.19540	-.15810	-.22820	.04640	627.20000
1.051	-2.953	.06970	.06460	.04160	.10640	-.14420	-.18240	-.16810	-.22820	.01800	627.20000
1.052	-.970	.08380	.06870	.04080	.10950	-.14150	-.17650	-.17240	-.22930	.02560	627.20000
1.050	.023	.06620	.07010	.03980	.10990	-.14100	-.17540	-.17350	-.23110	.04400	627.20000
1.051	1.058	.03300	.06880	.03840	.10760	-.14030	-.17390	-.17390	-.23150	.05090	627.20000
1.047	3.118	.09870	.06880	.03440	.10330	-.14200	-.16970	-.17510	-.23530	.05030	627.20000
1.049	5.184	.11240	.07690	.02820	.10510	-.13970	-.16930	-.17970	-.24160	.04730	627.20000
1.051	6.675	.13500	.09120	.02530	.10860	-.12650	-.16790	-.18610	-.24530	.04430	627.20000
	GRADIENT	.00715	.00697	-.00264	.00214	.00120	.00307	-.00201	-.00087	.00211	-.00000

RUN NO. 235/ 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHU	CHLL	CHUR	CHLR	CHEF	Q
1.197	-4.948	.03670	.06610	.02840	.09450	-.17470	-.20730	-.17650	-.24220	.03810	570.10000
1.201	-2.954	.06460	.07050	.02340	.09390	-.17070	-.20190	-.19080	-.24650	.04260	570.10000
1.200	-.964	.08250	.07630	.01810	.09430	-.16880	-.19610	-.19650	-.25080	.04370	570.10000
1.199	.026	.08690	.07830	.01570	.09400	-.16850	-.19220	-.19710	-.25250	.04480	570.10000
1.201	1.059	.09580	.08020	.01330	.09350	-.16790	-.18830	-.19780	-.25420	.04480	570.10000
1.199	3.122	.10910	.08490	.00990	.09480	-.16730	-.17960	-.19870	-.25740	.04010	570.10000
1.195	5.175	.12950	.08810	.00780	.09590	-.16170	-.16730	-.20140	-.25700	.03700	570.10000
1.196	6.660	.15820	.08960	.00610	.09570	-.16190	-.16420	-.21020	-.26210	.03630	570.10000
	GRADIENT	.00878	.00235	-.00235	.00201	.00088	.00341	-.00260	-.00190	.00035	-.00000

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F HS V NDM. RN/L

(BEJ:47) ( 26 JUN 74

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVW = .0000  
 ATRON = .0000 BDFLAP = -11.700  
 SPDRK = 85.000 RUDDER = -10.000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 248/ 0 RN/L = 3.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHX	CHY	CHZ	CHU	CHV	CHW	CHL	CHR	CHF
.598	-5.013	.05310	.04360	.00880	.05240	.05240	.05240	.05240	.05240	.05240
.600	-2.937	.06430	.04530	.00840	.05360	.05360	.05360	.05360	.05360	.05360
.605	-3.981	.07860	.04640	.00680	.05320	.05320	.05320	.05320	.05320	.05320
.598	.032	.06450	.04630	.00660	.05490	.05490	.05490	.05490	.05490	.05490
.600	1.041	.09120	.04910	.00600	.05510	.05510	.05510	.05510	.05510	.05510
.598	3.062	.10230	.05210	.00570	.05780	.05780	.05780	.05780	.05780	.05780
.597	5.085	.10310	.05530	.00600	.06130	.06130	.06130	.06130	.06130	.06130
.599	7.105	.12670	.05730	.00640	.06360	.06360	.06360	.06360	.06360	.06360
.598	9.127	.14810	.05980	.00640	.06620	.06620	.06620	.06620	.06620	.06620
GRADIENT		.06630	.06114	.00644	.06672	.06672	.06672	.06672	.06672	.06672

RUN NO. 245/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHX	CHY	CHZ	CHU	CHV	CHW	CHL	CHR	CHF
.799	-5.036	.04730	.05420	.00200	.05620	.05620	.05620	.05620	.05620	.05620
.800	-3.001	.05550	.05710	.00110	.05810	.05810	.05810	.05810	.05810	.05810
.798	-0.006	.06000	.05900	.00200	.06090	.06090	.06090	.06090	.06090	.06090
.796	.030	.06760	.05730	.00150	.05680	.05680	.05680	.05680	.05680	.05680
.799	1.048	.09390	.05930	.00110	.05980	.05980	.05980	.05980	.05980	.05980
.799	3.079	.10560	.06300	.00110	.06290	.06290	.06290	.06290	.06290	.06290
.796	5.110	.11770	.06670	.00160	.06420	.06420	.06420	.06420	.06420	.06420
.801	7.137	.13650	.06810	.00270	.06770	.06770	.06770	.06770	.06770	.06770
.801	9.168	.16920	.07110	.00270	.07280	.07280	.07280	.07280	.07280	.07280
GRADIENT		.07661	.06732	.00228	.07266	.07266	.07266	.07266	.07266	.07266

RUN NO. 242/ 0 RN/L = 3.76 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHX	CHY	CHZ	CHU	CHV	CHW	CHL	CHR	CHF
.907	-5.031	.03540	.07340	.00580	.07900	.07900	.07900	.07900	.07900	.07900
.904	-3.021	.05480	.08190	.00600	.08780	.08780	.08780	.08780	.08780	.08780
.898	-0.981	.07510	.08600	.00820	.09420	.09420	.09420	.09420	.09420	.09420
.902	.029	.08260	.08600	.00560	.09160	.09160	.09160	.09160	.09160	.09160
.905	1.052	.09150	.08680	.00510	.09180	.09180	.09180	.09180	.09180	.09180
.900	3.070	.10970	.09430	.00680	.09410	.09410	.09410	.09410	.09410	.09410
.897	5.110	.12510	.09490	.00730	.09440	.09440	.09440	.09440	.09440	.09440
.900	7.141	.14610	.09520	.00820	.09980	.09980	.09980	.09980	.09980	.09980
.899	9.174	.18360	.09270	.00910	.09980	.09980	.09980	.09980	.09980	.09980
GRADIENT		.09694	.08188	.00824	.09985	.09985	.09985	.09985	.09985	.09985



DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(08J047) (26 JUN 74 )

## REFERENCE DATA

SREF = 2.4710 SQ.FT. YNRP = 32.3010 IN.  
 LREF = 14.2440 IN. YNRP = 10000 IN.  
 BREF = 26.1004 IN. YNRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.0000 ELEVON = .0000  
 AIRLON = .0000 BODYLAP = -11.7000  
 SPDRK = 85.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 239/ 0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNEI	CNEO	CNET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.055	-5.029	.03240	.00740	-.02820	-.02090	-.13430	-.17940	-.14620	-.19990	.05350	629.80000
1.050	-5.007	.03420	.01260	-.02980	-.01720	-.13060	-.16770	-.15170	-.20090	.05660	629.80000
1.049	-.965	.07170	.02220	-.02880	-.02660	-.12760	-.15440	-.15210	-.21160	.05570	629.80000
1.055	.026	.08470	.02500	-.02920	-.00410	-.12680	-.14680	-.15300	-.20520	.05390	629.80000
1.056	1.034	.09650	.02360	-.02970	-.02610	-.12620	-.14210	-.15480	-.20990	.05440	629.80000
1.051	3.066	.11370	.03460	-.02770	.02890	-.12370	-.13980	-.15920	-.21810	.05600	629.80000
1.049	5.102	.12520	.03730	-.02600	.01130	-.12170	-.13270	-.15910	-.22040	.05170	629.80000
1.048	7.129	.14060	.04070	-.02550	.01520	-.11970	-.13490	-.16420	-.23110	.04890	629.80000
1.051	9.153	.16190	.04290	-.02550	.01750	-.08790	-.12050	-.16060	-.22970	.04760	629.80000
GRADIENT		.01024	.00333	.00227	.00360	.00109	.00474	-.00122	-.00296	-.00015	-.00000

RUN NO. 236/ 0 RN/L = 2.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CNR	CNEI	CNEO	CNET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.197	-5.026	.05280	-.00850	-.03630	-.04480	-.15210	-.17050	-.16790	-.20850	.01620	568.80000
1.197	-5.005	.07400	-.00420	-.03810	-.04230	-.14820	-.15940	-.17110	-.20950	.01820	568.80000
1.194	-.984	.08590	.00170	-.03800	-.03630	-.14900	-.15260	-.17150	-.21600	.01770	568.80000
1.197	.025	.09460	.00380	-.03790	-.03400	-.14760	-.14690	-.17150	-.21760	.01600	568.80000
1.194	1.041	.10310	.00400	-.03810	-.03410	-.14750	-.14180	-.17270	-.21980	.01640	568.80000
1.196	3.047	.12380	.00320	-.03710	-.02790	-.14460	-.13670	-.17700	-.22820	.01450	568.80000
1.195	5.093	.13800	.00210	-.03590	-.02380	-.14130	-.13220	-.17970	-.23170	.01490	568.80000
1.194	7.117	.16440	.01380	-.03470	-.02090	-.13900	-.12920	-.18520	-.24330	.01410	568.80000
1.197	9.145	.19910	.01410	-.03440	-.02020	-.11490	-.12930	-.19110	-.25220	.01430	568.80000
GRADIENT		.00623	.00210	.00014	.00224	.00261	.00375	-.00090	-.00295	-.00061	-.00000

ARC 11-747 0453A B C M F M V NOM. RN/L

(BEJ048) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .000  
 AIRLON = .000 BOFLAP = -11.700  
 SPDRK = 85.000 RUDDER = -10.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 249/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.539	-4.932	.05690	.05510	.02270	.07770	-.08310	-.12680	-.10520	-.16150	-.03380	481.40000
.539	-2.952	.07390	.05740	.02300	.08040	-.07880	-.11960	-.11070	-.16160	-.03450	481.40000
.601	-.965	.08510	.05900	.02330	.08220	-.07770	-.11610	-.11320	-.16580	-.03180	481.40000
.600	.028	.09150	.06120	.02330	.08350	-.07720	-.11490	-.11470	-.16890	-.03140	481.40000
.599	1.057	.09770	.06160	.02370	.08430	-.07690	-.11400	-.11660	-.17290	-.03100	481.40000
.597	3.110	.10810	.06200	.02350	.08550	-.07860	-.11220	-.11980	-.17310	-.03250	481.40000
.600	5.167	.11860	.06400	.02370	.08770	-.07640	-.11250	-.12210	-.18550	-.03180	481.40000
.600	6.898	.13940	.06480	.02400	.08880	-.05700	-.11370	-.12130	-.18840	-.03150	481.40000
GRADIENT		.00630	.00086	.00611	.00098	.00056	.00175	-.00174	-.00225	.00032	.00000

RUN NO. 246/ 0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.802	-5.051	.05120	.01850	-.03580	-.01730	-.09450	-.14590	-.11120	-.17540	-.02870	644.60000
.799	-3.008	.06100	.01130	-.03290	-.02170	-.08750	-.14860	-.11070	-.18640	-.03140	644.60000
.799	-.977	.07550	.00590	-.03390	-.02610	-.08180	-.14720	-.11130	-.19320	-.03490	644.60000
.797	.035	.08600	.00590	-.03570	-.02980	-.07940	-.14440	-.11300	-.19720	-.03690	644.60000
.800	1.056	.09300	.00390	-.03710	-.03320	-.07780	-.14130	-.11310	-.19890	-.03630	644.60000
.797	3.102	.10040	.00270	-.03930	-.03660	-.07420	-.13320	-.11460	-.19320	-.03440	644.60000
.797	5.137	.09920	-.00140	-.04090	-.04220	-.07480	-.12150	-.11640	-.17310	-.03460	644.60000
.800	7.182	.10960	-.00110	-.03820	-.03920	-.06820	-.10180	-.12130	-.15840	-.03170	644.60000
.798	9.228	.16220	-.00800	-.03210	-.04000	-.06080	-.07610	-.12310	-.15610	-.03630	644.60000
GRADIENT		.00666	-.00136	-.00110	-.00245	.00216	.00256	-.00066	-.00128	-.00052	-.00000

RUN NO. 243/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.898	-5.057	.07830	.00040	-.03470	-.03420	-.10230	-.10990	-.11200	-.17840	-.07220	613.40000
.902	-3.023	.07340	.00800	-.04140	-.03340	-.09870	-.14150	-.11750	-.19610	-.06270	613.40000
.899	-.985	.07580	-.00360	-.04120	-.04480	-.09530	-.15210	-.11960	-.20160	-.06980	613.40000
.903	.033	.07860	-.00550	-.04290	-.04840	-.08940	-.15310	-.12010	-.20100	-.07100	613.40000
.900	1.061	.08090	-.00730	-.04280	-.05010	-.08740	-.15120	-.12300	-.19650	-.07030	613.40000
.901	3.098	.07740	-.01310	-.04530	-.05840	-.08530	-.14730	-.12890	-.18100	-.07070	613.40000
.904	5.150	.07090	-.01760	-.04580	-.06340	-.07820	-.13220	-.13020	-.15100	-.06900	613.40000
.901	7.189	.06410	-.02450	-.04450	-.06910	-.06120	-.10800	-.12770	-.10560	-.06060	613.40000
.900	9.236	.12660	-.01960	-.04000	-.05970	-.02240	-.07720	-.12280	-.10340	-.05000	613.40000
GRADIENT		.00684	-.00328	-.00065	-.00393	.00226	-.00031	-.00184	-.00247	.00120	-.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C M F W V NOM. RN/L

(BEJ048) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEVON = .0000  
 AILRON = .0000 BOFLAP = -11.7000  
 SPDRK = 85.0000 RUDDER = -10.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 240/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.049	-5.044	.07820	-.11760	-.07490	-.19250	-.14740	-.13670	-.15480	-.20750	.02370	627.70000
1.055	-3.015	.06510	-.12230	-.07780	-.20010	-.14410	-.15650	-.15550	-.21020	.02450	627.70000
1.052	-.983	.07280	-.13210	-.07990	-.21200	-.13970	-.15880	-.15640	-.21490	.02340	627.70000
1.051	.024	.06440	-.12490	-.08030	-.20520	-.13390	-.15360	-.15300	-.21890	.01880	627.70000
1.048	1.047	.10320	-.11680	-.07890	-.19580	-.12870	-.14650	-.15340	-.22510	.01570	627.70000
1.048	3.088	.12050	-.10870	-.07950	-.18820	-.12160	-.13850	-.15390	-.22070	.01710	627.70000
1.048	5.127	.10800	-.12190	-.08160	-.20250	-.11640	-.13180	-.16820	-.18820	.02180	627.70000
1.052	7.163	.10450	-.12550	-.08020	-.20560	-.11330	-.11580	-.17690	-.15670	.01650	627.70000
1.051	9.205	.12730	-.11350	-.07670	-.19020	-.08950	-.11790	-.18280	-.14190	.01080	627.70000
	GRADIENT	.00967	.00276	-.00020	.00256	.00366	.00326	-.00050	-.00205	-.000147	-.000000

RUN NO. 237/0 RN/L = 2.97 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.197	-5.033	.07210	-.13110	-.07760	-.20870	-.15460	-.14690	-.16610	-.20750	-.01100	569.10000
1.200	-3.014	.06700	-.11210	-.07570	-.18780	-.15310	-.15720	-.16560	-.21170	-.01610	569.10000
1.200	-.988	.06520	-.11290	-.07890	-.19180	-.14880	-.15670	-.16620	-.22440	-.01430	569.10000
1.199	.023	.10170	-.12330	-.08120	-.20450	-.14120	-.14810	-.16270	-.22820	-.01540	569.10000
1.195	1.044	.11670	-.12490	-.08210	-.20690	-.13760	-.14360	-.16340	-.23450	-.01480	569.10000
1.195	3.081	.13800	-.13180	-.08130	-.21310	-.12810	-.12970	-.16740	-.22840	-.01890	569.10000
1.194	5.115	.13010	-.13510	-.08020	-.21510	-.12220	-.11890	-.17200	-.19960	-.01330	569.10000
1.197	7.152	.12320	-.13080	-.07910	-.20980	-.12240	-.11110	-.18550	-.17120	-.00860	569.10000
1.196	9.198	.15370	-.12720	-.07700	-.20420	-.10340	-.10670	-.19730	-.16560	-.00470	569.10000
	GRADIENT	.01203	-.00350	-.00098	-.00448	.00424	.00471	-.00013	-.00296	-.00044	-.000000

ARC 11-747 QAS3A B C H F M V N M, RN/L SEAL, EL

(BEJ049) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .03100 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AILERON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 375/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.599	-1.515	-1.00040	-1.02610	-1.02610	-1.05230	-1.02340	-1.04770	-1.02260	-1.04800	-1.12550	480.80000
.599	.104	-1.00020	-1.02680	-1.02730	-1.05400	-1.02340	-1.04710	-1.02240	-1.04790	-1.12650	480.80000
.598	1.115	-1.00010	-1.02720	-1.02910	-1.05630	-1.02340	-1.04720	-1.02230	-1.04790	-1.12660	480.80000
.596	1.626	-1.00010	-1.02820	-1.03050	-1.05870	-1.02340	-1.04730	-1.02250	-1.04810	-1.12710	480.80000
.596	3.572	-1.00050	-1.03120	-1.03580	-1.06700	-1.02340	-1.04800	-1.02260	-1.04810	-1.12880	480.80000
.600	5.558	-1.00000	-1.03850	-1.04110	-1.07960	-1.02320	-1.04750	-1.02230	-1.04830	-1.13140	480.80000
.597	7.621	-1.00090	-1.05240	-1.04780	-1.10120	-1.02350	-1.04660	-1.02230	-1.04820	-1.13580	480.80000
.600	9.595	-1.00050	-1.05590	-1.05300	-1.10890	-1.02330	-1.04750	-1.02280	-1.04840	-1.13900	480.80000
.595	12.640	-1.00070	-1.07630	-1.06170	-1.13800	-1.02390	-1.04710	-1.02340	-1.04830	-1.14120	480.80000
.599	15.690	-1.00120	-1.10650	-1.07070	-1.17120	-1.02410	-1.04760	-1.02380	-1.04910	-1.15370	480.80000
.597	18.730	-1.00120	-1.13410	-1.08430	-1.21840	-1.02580	-1.04840	-1.02560	-1.04970	-1.17440	480.80000
.597	21.760	-1.00040	-1.13270	-1.09230	-1.22500	-1.02800	-1.05130	-1.02780	-1.05250	-1.19300	480.80000
.597	24.720	-1.00150	-1.14850	-1.06580	-1.21430	-1.03460	-1.05590	-1.03450	-1.05640	-1.20750	480.80000
.595	28.680	-1.00630	-1.13440	-1.05690	-1.19130	-1.04640	-1.07690	-1.04450	-1.07250	-1.22770	480.80000
GRADIENT		-1.00004	-1.00124	-1.00238	-1.00361	-1.00000	-1.00012	-1.00002	-1.00004	-1.00075	480.80000

RUN NO. 369/ 0 RN/L = 4.25 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHRF	Q
.792	-1.511	-1.00030	-1.03570	-1.03100	-1.06670	-1.02340	-1.05270	-1.02340	-1.05240	-1.13940	634.20000
.802	.100	-1.00050	-1.03590	-1.03190	-1.06780	-1.02320	-1.05230	-1.02370	-1.05230	-1.14150	634.20000
.798	1.109	-1.00020	-1.03700	-1.03430	-1.07130	-1.02340	-1.05260	-1.02360	-1.05220	-1.14130	634.20000
.802	1.620	-1.00010	-1.03710	-1.03500	-1.07210	-1.02350	-1.05260	-1.02350	-1.05260	-1.14240	634.20000
.801	3.562	-1.00000	-1.03970	-1.03870	-1.07840	-1.02310	-1.05230	-1.02350	-1.05200	-1.14300	634.20000
.800	5.563	-1.00100	-1.04850	-1.04270	-1.09120	-1.02320	-1.05180	-1.02370	-1.05230	-1.14640	634.20000
.799	7.618	-1.00060	-1.06260	-1.04980	-1.11230	-1.02310	-1.05250	-1.02400	-1.05220	-1.15230	634.20000
.799	9.595	-1.00060	-1.08500	-1.05810	-1.14310	-1.02370	-1.05280	-1.02440	-1.05280	-1.15290	634.20000
.800	12.620	-1.00030	-1.11780	-1.06830	-1.18610	-1.02510	-1.05450	-1.02780	-1.05410	-1.15740	634.20000
.800	15.690	-1.00020	-1.15090	-1.08320	-1.23400	-1.02660	-1.05730	-1.02760	-1.05650	-1.17470	634.20000
.799	18.760	-1.00160	-1.14720	-1.09810	-1.24530	-1.02980	-1.06260	-1.03150	-1.06020	-1.18810	634.20000
.799	21.710	-1.00070	-1.14980	-1.09130	-1.24010	-1.03590	-1.07200	-1.03630	-1.05530	-1.21630	634.20000
.798	24.740	-1.01380	-1.15000	-1.06810	-1.21810	-1.04610	-1.08160	-1.04710	-1.06670	-1.26120	634.20000
.800	28.680	-1.01160	-1.16180	-1.06920	-1.23300	-1.05250	-1.08190	-1.05250	-1.07040	-1.26330	634.20000
GRADIENT		-1.00001	-1.00100	-1.00192	-1.00291	-1.00005	-1.00006	-1.00001	-1.00008	-1.00087	634.20000



DATE 06 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NNM. RN/L SCALEL

(BEJ049) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .000 ELEVON = 15.000  
 AIRLON = .000 BDFLAP = 16.300  
 SPDGRK = 25.000 RUDDER = .000  
 ELEV-L = 15.000 ELEV-R = 15.000

RUN NO. 368/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.900	-1.545	-0.0080	-0.0277	-0.0269	-0.0350	-0.0360	-0.0352	-0.0270	-0.1569	614.00000
.899	.085	-0.0090	-0.0289	-0.0275	-0.0346	-0.0327	-0.0342	-0.0220	-0.1570	614.00000
.902	1.093	-0.0010	-0.0300	-0.0300	-0.0340	-0.0628	-0.0339	-0.0190	-0.1576	614.00000
.900	1.613	.00010	-0.0325	-0.0317	-0.0330	-0.0620	-0.0335	-0.0160	-0.1580	614.00000
.901	3.598	.00040	-0.0415	-0.0400	-0.0321	-0.0618	-0.0329	-0.0190	-0.1617	614.00000
.903	5.572	.00060	-0.0562	-0.0531	-0.0300	-0.0599	-0.0312	-0.0396	-0.1652	614.00000
.901	7.635	-0.00040	-0.0833	-0.0656	-0.0313	-0.0590	-0.0323	-0.0575	-0.1738	614.00000
.903	9.579	.00060	-0.1056	-0.0732	-0.0324	-0.0599	-0.0360	-0.0592	-0.1786	614.00000
.900	12.640	.00060	-0.1588	-0.0835	-0.0336	-0.0626	-0.0350	-0.0616	-0.1855	614.00000
.900	15.720	-0.00210	-0.2044	-0.1010	-0.0390	-0.0685	-0.0394	-0.0661	-0.2012	614.00000
.900	18.720	-0.00590	-0.2067	-0.0970	-0.0482	-0.0782	-0.0483	-0.0720	-0.2245	614.00000
.900	21.750	-0.00690	-0.1814	-0.1121	-0.0455	-0.0870	-0.0525	-0.0820	-0.2758	614.00000
.900	24.730	-0.01650	-0.1706	-0.0796	-0.0730	-0.0778	-0.0740	-0.0645	-0.3117	614.00000
.901	28.650	-0.00780	-0.2020	-0.0400	-0.0829	-0.0683	-0.0828	-0.0616	-0.3156	614.00000
GRADIENT		.00034	-0.0034	-0.0032	-0.0073	.00040	.00060	.00018	-0.0017	-0.00000

RUN NO. 367/0 RN/L = 3.49 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.049	-1.574	-0.0160	-0.1130	-0.0681	-0.0791	-0.0830	-0.0724	-0.0340	-0.2490	628.90000
1.054	.086	-0.0120	-0.1164	-0.0699	-0.0780	-0.0876	-0.0725	-0.0275	-0.2529	628.90000
1.055	1.091	-0.0150	-0.1196	-0.0719	-0.0774	-0.0867	-0.0709	-0.0160	-0.2582	628.90000
1.055	1.601	-0.0110	-0.1226	-0.0725	-0.0767	-0.0810	-0.0700	-0.0100	-0.2588	628.90000
1.053	3.589	-0.0190	-0.1301	-0.0791	-0.0740	-0.0842	-0.0680	-0.0783	-0.2656	628.90000
1.051	5.562	-0.0128	-0.1394	-0.0880	-0.0710	-0.0815	-0.0647	-0.0750	-0.2756	628.90000
1.052	7.626	-0.0125	-0.1507	-0.0970	-0.0648	-0.0759	-0.0585	-0.0698	-0.2863	628.90000
1.052	9.557	-0.0147	-0.1633	-0.1054	-0.0596	-0.0711	-0.0521	-0.0640	-0.2981	628.90000
1.051	12.600	-0.00950	-0.2058	-0.1199	-0.0518	-0.0648	-0.0482	-0.0588	-0.3119	628.90000
1.055	15.680	-0.00810	-0.2613	-0.1264	-0.0543	-0.0642	-0.0500	-0.0594	-0.3290	628.90000
1.051	18.710	-0.00960	-0.2988	-0.1371	-0.0520	-0.0670	-0.0539	-0.0584	-0.3460	628.90000
1.047	21.740	-0.00860	-0.2998	-0.1393	-0.0594	-0.0630	-0.0560	-0.0570	-0.3640	628.90000
1.052	24.760	-0.00510	-0.2675	-0.1340	-0.0580	-0.0758	-0.0660	-0.0735	-0.3943	628.90000
1.050	28.690	-0.0128	-0.2762	-0.1197	-0.0563	-0.0912	-0.0820	-0.0821	-0.4184	628.90000
GRADIENT		.00010	-0.0042	-0.0028	.00027	.00098	.00112	.00123	-0.0089	.00000

ARC 11-747 0453A B C M F W V NOM. RN/L SEAL/EL

(BEJ049) (12 MAR 74 )

## REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 32.3015 IN.  
 LREF = 14.2445 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

BETA = .0000 ELEVOM = 15.000  
 AILRON = .0000 BDFLAP = 16.300  
 SPDRK = 25.0000 RUDDER = .0000  
 ELEV-L = 15.0000 ELEV-R = 15.0000

RUN NO. 366/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHCI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.198	-1.590	-0.01200	-1.13940	-0.07040	-2.09800	-0.07920	-0.07640	-0.07390	-0.06970	-2.6150	569.90000
1.201	-1.569	-0.01170	-1.14250	-0.07320	-2.1570	-0.07840	-0.07510	-0.07350	-0.06820	-2.6560	569.90000
1.204	-1.571	-0.01160	-1.14670	-0.07770	-2.2450	-0.07680	-0.07330	-0.07170	-0.06680	-2.7300	569.90000
1.204	-1.611	-0.01080	-1.14890	-0.08070	-2.2960	-0.07600	-0.07250	-0.07140	-0.06630	-2.7690	569.90000
1.200	-3.564	-0.01010	-1.15540	-0.09090	-2.4620	-0.07380	-0.07090	-0.06960	-0.06500	-2.9050	569.90000
1.199	-5.530	-0.00870	-1.17100	-0.09780	-2.6890	-0.07210	-0.07060	-0.06890	-0.06500	-3.0370	569.90000
1.198	-7.648	-0.00830	-1.18740	-0.10510	-2.9250	-0.07080	-0.07060	-0.06810	-0.06490	-3.1460	569.90000
1.196	-9.569	-0.00920	-1.20020	-0.11160	-3.1180	-0.07040	-0.07080	-0.06720	-0.06480	-3.2650	569.90000
1.197	-12.620	-0.00930	-1.22040	-0.12470	-3.4510	-0.06960	-0.07050	-0.06630	-0.06450	-3.4420	569.90000
1.195	-15.690	-0.01130	-1.26560	-0.12480	-3.9040	-0.07250	-0.07360	-0.06890	-0.06580	-3.6030	569.90000
1.197	-18.740	-0.01140	-1.29540	-0.13520	-4.3060	-0.07500	-0.07600	-0.07080	-0.06960	-3.7890	569.90000
1.198	-21.710	-0.00790	-1.29950	-0.14110	-4.4060	-0.07340	-0.07330	-0.07120	-0.06760	-3.9630	569.90000
1.197	-24.680	-0.00690	-1.30040	-0.14290	-4.4320	-0.07740	-0.06830	-0.07370	-0.06560	-4.1250	569.90000
1.194	-28.640	-0.01130	-1.30760	-0.13900	-4.4670	-0.08250	-0.06320	-0.07670	-0.05770	-4.2580	569.90000
	GRADIENT	-0.0247	-0.00383	-0.00496	-0.02877	-0.00132	-0.00132	-0.00107	-0.00109	-0.00704	.00000

DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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(BEJ050) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

RUN NO. 365/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

## PARAMETRIC DATA

BETA = .0000 ELEVON = .0000  
 AIRLON = .0000 BOFLAP = 16.300  
 SPOBRK = 25.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-1.550	-.00300	.04980	.02490	.07470	-.02260	-.04610	-.02260	-.04310	-.11220	478.50000
.597	-.085	-.00310	.05020	.02510	.07530	-.02250	-.04620	-.02230	-.04340	-.11320	478.50000
.602	1.122	-.00300	.05020	.02480	.07510	-.02230	-.04590	-.02220	-.04310	-.11380	478.50000
.599	1.611	-.00310	.05050	.02460	.07510	-.02230	-.04610	-.02220	-.04310	-.11430	478.50000
.597	3.554	-.00290	.05070	.02350	.07410	-.02240	-.04660	-.02230	-.04370	-.11620	478.50000
.597	5.560	-.00220	.04830	.01910	.06740	-.02240	-.04620	-.02260	-.04380	-.11640	478.50000
.597	7.611	-.00330	.04490	.01510	.06000	-.02290	-.04720	-.02260	-.04420	-.12140	478.50000
.598	9.592	-.00240	.03920	.00860	.04780	-.02280	-.04650	-.02290	-.04430	-.12150	478.50000
.600	12.640	-.00280	.03380	-.00190	.02170	-.02310	-.04730	-.02330	-.04490	-.12770	478.50000
.596	15.690	-.00280	.00590	-.03200	-.01320	-.02410	-.04740	-.02330	-.04490	-.13720	478.50000
.600	18.730	-.00210	-.02520	-.05810	-.05810	-.02500	-.04800	-.02530	-.04560	-.15850	478.50000
.598	21.730	-.00330	-.02570	-.04080	-.06660	-.02740	-.05110	-.02740	-.04770	-.17830	478.50000
.599	24.710	-.00480	-.04800	-.04000	-.08800	-.03180	-.05740	-.03170	-.05280	-.19420	478.50000
.599	28.680	-.00730	-.05820	-.02630	-.08460	-.04280	-.06830	-.04200	-.06180	-.21830	478.50000
GRADIENT		.00203	.00020	-.00037	-.00019	.00005	-.00011	.00006	-.00011	-.00093	.00000

RUN NO. 364/0 RN/L = 4.24 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.800	-1.577	-.00230	.05270	.02740	.08200	-.02270	-.05130	-.02330	-.04850	-.13010	642.60000
.801	-.092	-.00220	.05330	.02770	.08110	-.02260	-.05100	-.02310	-.04830	-.13050	642.60000
.800	1.112	-.00190	.05430	.02770	.08200	-.02230	-.05010	-.02310	-.04740	-.12940	642.60000
.800	1.624	-.00280	.05540	.02840	.08380	-.02260	-.05120	-.02290	-.04710	-.13210	642.60000
.797	3.500	-.00230	.05650	.02820	.08470	-.02230	-.05060	-.02320	-.04740	-.13230	642.60000
.799	5.557	-.00170	.05690	.02430	.08110	-.02230	-.05080	-.02320	-.04820	-.13610	642.60000
.800	7.601	-.00270	.05340	.01750	.07090	-.02250	-.05190	-.02340	-.04800	-.13830	642.60000
.803	9.571	-.00250	.04300	.00200	.04500	-.02320	-.05240	-.02380	-.04900	-.14140	642.60000
.799	12.610	-.00340	.02060	-.00800	.01250	-.02440	-.05320	-.02500	-.04920	-.14480	642.60000
.797	15.680	-.00320	-.00120	-.02110	-.02540	-.02540	-.05510	-.02650	-.05080	-.16200	642.60000
.800	18.730	-.00360	-.01520	-.03870	-.02870	-.02810	-.05970	-.02940	-.05480	-.18020	642.60000
.796	21.730	-.00630	-.03780	-.03950	-.07730	-.03310	-.06570	-.03420	-.05830	-.20300	642.60000
.798	24.720	-.01120	-.06030	-.02820	-.07730	-.03310	-.06570	-.03420	-.05830	-.23190	642.60000
.799	28.660	-.01250	-.07060	-.02780	-.09840	-.04750	-.07300	-.04830	-.05970	-.24910	642.60000
GRADIENT		-.00004	.00095	.00020	.00116	.00009	.00013	.00002	.00025	-.00057	.00000

ARC 11-747 QM33A B C H F W V NDM. RN/L SEALED

(BEAMS) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMPF = 20.3000 IN.  
 LREF = 14.2440 IN. YMPF = 10.0000 IN.  
 BREF = 20.1004 IN. ZMPF = 11.2500 IN.  
 SCALE = 100.00 SCALE

BETA = 1.000  
 ALTRDM = 16.300  
 SDOBER = 1.000  
 ELEV-1 = 1.000  
 ELEV-2 = 1.000

## PARAMETRIC DATA

RUN NO. 363/0 RN/L = 3.74 GRADIENT INTERVAL = -5.000/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHUL	CHUR	CHLR	CHFR
1.052	-1.533	-0.03310	0.05300	0.03360	-0.03170	-0.06180	-0.03600	-1.15180
1.051	0.076	-0.03320	0.05450	0.03370	-0.03120	-0.06130	-0.03740	-1.15080
1.054	1.033	-0.03290	0.05640	0.03280	-0.03070	-0.06100	-0.03760	-1.15210
1.053	1.609	-0.03270	0.05590	0.03170	-0.02900	-0.05930	-0.03630	-1.15070
1.052	3.155	-0.03340	0.05100	0.02390	-0.02870	-0.06120	-0.03610	-1.15380
1.051	5.550	-0.03380	0.05560	0.02650	-0.02720	-0.05920	-0.03470	-1.15600
1.050	7.548	-0.03220	0.07210	0.01960	-0.02830	-0.05990	-0.03500	-1.16140
1.049	9.588	-0.03260	0.06270	0.00850	-0.02810	-0.05720	-0.03300	-1.16080
1.048	12.590	-0.03330	0.05320	-0.00540	-0.02930	-0.05690	-0.03400	-1.16650
1.047	15.660	-0.03390	0.04230	-0.02570	-0.03240	-0.06400	-0.03670	-1.16300
1.046	18.730	-0.03730	0.02570	-0.04390	-0.03980	-0.07180	-0.03830	-1.16630
1.045	21.720	-0.03810	0.01470	-0.05130	-0.04850	-0.07580	-0.03650	-1.16270
1.044	24.730	-0.04250	0.00030	-0.05930	-0.06530	-0.07210	-0.03550	-1.16350
1.043	28.660	-0.04370	-0.01370	-0.04210	-0.07230	-0.05730	-0.03570	-1.16470
GRADIENT	-0.00004	-0.00185	-0.00037	-0.00029	0.00077	0.00041	0.00046	-0.00053

RUN NO. 362/0 RN/L = 3.49 GRADIENT INTERVAL = -5.000/ 5.00

MACH	ALPHA	CHR	CHET	CHED	CHUL	CHUR	CHLR	CHFR
1.054	-1.537	-0.03320	0.07320	0.04460	-0.07550	-0.08620	-0.07680	-1.20550
1.052	0.080	-0.03290	0.07650	0.04330	-0.07490	-0.08560	-0.07730	-1.20230
1.054	1.033	-0.03340	0.07210	0.03730	-0.07400	-0.08500	-0.07670	-1.21370
1.054	1.609	-0.03370	0.06930	0.03460	-0.07300	-0.08270	-0.07550	-1.21570
1.053	3.154	-0.03400	0.06120	0.02130	-0.06930	-0.08120	-0.07200	-1.22310
1.050	5.536	-0.03480	0.05160	0.01400	-0.06500	-0.07920	-0.06710	-1.24060
1.048	7.609	-0.03510	0.04320	0.01160	-0.05790	-0.06890	-0.06150	-1.25360
1.049	9.565	-0.03360	0.02670	0.00140	-0.05520	-0.06730	-0.05690	-1.25920
1.050	12.590	-0.03280	0.02060	0.04150	-0.06210	-0.07320	-0.06480	-1.23020
1.051	15.670	-0.03260	0.01470	0.03500	-0.06100	-0.07350	-0.05800	-1.21370
1.052	18.710	-0.03380	0.00440	0.02800	-0.04490	-0.05630	-0.04430	-1.23550
1.046	21.720	-0.03950	-0.01650	0.00830	-0.04340	-0.05590	-0.04250	-1.26370
1.050	24.720	-0.04650	-0.03900	0.00380	-0.04510	-0.07120	-0.04230	-1.33750
1.056	28.630	-0.04110	-0.02260	0.00380	-0.04900	-0.07170	-0.04260	-1.33750
GRADIENT	-0.00027	-0.00435	-0.00078	-0.00015	0.00152	0.00173	0.00165	-0.00570



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TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F W V NOM. RN/L SEAL.EL

(BEJ050) (12 MAR 74)

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

BETA = .000 ELEVON = .000  
 ALLRON = .000 BDFLAP = 16.300  
 SPDRK = 25.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

# PARAMETRIC DATA

RUN NO. 361/0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	ALPHA	CHP	CHET	CHCO	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.201	-1.587	-0.01440	.08900	.02260	.11160	-.07820	-.07650	-.07330	-.06710	-.21710	570.30000
1.200	.063	-0.01400	.08440	.01800	.10240	-.07810	-.07510	-.07320	-.06600	-.22100	570.30000
1.203	1.095	-0.01470	.07580	.01120	.08700	-.07690	-.07400	-.07180	-.06440	-.22850	570.30000
1.203	1.602	-0.01360	.07100	.00700	.07800	-.07620	-.07320	-.07170	-.06410	-.23240	570.30000
1.203	3.543	-0.01310	.05510	-.00350	.05160	-.07390	-.07180	-.06960	-.06300	-.24820	570.30000
1.201	5.525	-0.01180	.03980	-.01530	.02440	-.07220	-.07080	-.06870	-.06260	-.26390	570.30000
1.200	7.589	-0.01110	.02430	-.02640	-.00210	-.07020	-.06950	-.06740	-.06220	-.28060	570.30000
1.198	9.573	-0.01140	.00530	-.03470	-.02940	-.06920	-.06940	-.06610	-.06210	-.32300	570.30000
1.195	12.610	-0.01040	-.03180	-.04450	-.07630	-.06810	-.06940	-.06510	-.06210	-.34220	570.30000
1.197	15.670	-0.01240	-.08510	-.05940	-.07050	-.07050	-.07420	-.07010	-.06910	-.36530	570.30000
1.196	18.700	-0.01150	-.12210	-.07510	-.07330	-.07330	-.07730	-.07250	-.06830	-.38910	570.30000
1.199	21.720	-.00600	-.12320	-.08220	-.20550	-.07230	-.07450	-.07040	-.06470	-.42660	570.30000
1.199	24.703	-0.01040	-.16460	-.08820	-.25280	-.07510	-.07640	-.07040	-.05910	-.43270	570.30000
1.197	28.640	-0.01150	-.20030	-.10110	-.30140	-.07430	-.05820	-.07000	-.05000	-.450759	.000000
	GRADIENT	.00030	-.00829	-.00634	-.01463	.00109	.00110	.00093	.00098		

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJMS) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 32.3010 IN.  
 LREF = 14.2440 IN. YREF = 10.0000 IN.  
 BREF = 20.1104 IN. ZREF = 11.2500 IN.  
 SCALE = 10000 SCALE

## PARAMETRIC DATA

ALPHA = 1.000 ELEVON = 1.000  
 AILEON = 1.000 SDFEAP = 11.700  
 SPODER = 55.000 SDFEER = 25.000  
 ELEVLE = 1.000 ELEVLE = 1.000

RUN NO. 232/0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHL	CHT	CHU	CHV	CHW	CHX	CHY	CHZ	CHQ
.600	-4.937	.21730	.05500	.02220	.00720	-.03430	-.10240	-.15710	-.2320	-.220	441.2000
.620	-2.959	.23410	.05670	.02270	.00740	-.03560	-.10360	-.16330	-.2470	-.240	441.2000
.640	-.972	.24450	.05670	.02280	.00750	-.03590	-.10380	-.16570	-.2510	-.250	441.2000
.660	.027	.24900	.0565	.02300	.00760	-.03600	-.10390	-.16720	-.2550	-.250	441.2000
.680	1.040	.25220	.05610	.02310	.00760	-.03590	-.10380	-.16720	-.2550	-.250	441.2000
.700	3.102	.25490	.05540	.02310	.00750	-.03570	-.10370	-.16720	-.2550	-.250	441.2000
.720	5.162	.25690	.05380	.02310	.00750	-.03570	-.10370	-.16650	-.2530	-.240	441.2000
.740	6.799	.25810	.05450	.02300	.00740	-.03570	-.10370	-.16650	-.2530	-.240	441.2000
.760	GRADIENT	.25910	.0557	.02310	.00750	-.0358	-.10370	-.1665	-.2530	-.240	441.2000

RUN NO. 226/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHL	CHT	CHU	CHV	CHW	CHX	CHY	CHZ	CHQ
.600	-4.972	.24160	.05140	.02400	.00770	-.03290	-.10270	-.15600	-.2320	-.220	641.2000
.620	-2.951	.26650	.05300	.02450	.00820	-.03260	-.10290	-.16250	-.2470	-.240	641.2000
.640	-.930	.26160	.05570	.02570	.00700	-.03140	-.10270	-.16700	-.2510	-.250	641.2000
.660	1.17	.26620	.05730	.02600	.00760	-.03230	-.10260	-.16850	-.2550	-.250	641.2000
.680	3.140	.26250	.05600	.02620	.00760	-.03260	-.10260	-.16850	-.2550	-.250	641.2000
.700	5.115	.26300	.05580	.02640	.00750	-.03260	-.10260	-.16850	-.2550	-.250	641.2000
.720	5.102	.26320	.05710	.02670	.00750	-.03240	-.10260	-.16850	-.2550	-.250	641.2000
.740	6.666	.26160	.07240	.02680	.00720	-.03200	-.10240	-.16850	-.2530	-.240	641.2000
.760	GRADIENT	.26545	.0615	.02700	.00700	-.03120	-.10220	-.16850	-.2530	-.240	641.2000

RUN NO. 226/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHL	CHT	CHU	CHV	CHW	CHX	CHY	CHZ	CHQ
.600	-4.950	.26320	.07510	.03310	.00800	-.03210	-.10240	-.17600	-.2440	-.240	641.2000
.620	-2.972	.29180	.06450	.03410	.00810	-.03160	-.10250	-.18200	-.2580	-.240	641.2000
.640	-.960	.31030	.06530	.03430	.00830	-.03160	-.10250	-.18650	-.2650	-.250	641.2000
.660	.026	.31770	.06600	.03460	.00790	-.03260	-.10240	-.18700	-.2650	-.250	641.2000
.680	1.040	.32460	.06970	.03570	.02020	-.03200	-.10260	-.18350	-.2650	-.250	641.2000
.700	3.122	.33330	.07170	.03650	.02130	-.03170	-.10270	-.18350	-.2650	-.250	641.2000
.720	5.160	.32380	.06850	.03620	.00910	-.03200	-.10270	-.18350	-.2650	-.250	641.2000
.740	6.643	.33660	.06260	.03740	.00700	-.03170	-.10240	-.18350	-.2650	-.250	641.2000
.760	GRADIENT	.30866	.06189	.03751	.00700	-.03170	-.10240	-.18350	-.2650	-.250	641.2000



DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

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ARC 11-747 Q453A B C M F W V NDM. RN/L

DBE(051) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 51.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 29.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SPDBRK = 55.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 223/ 0 RN/L = 3.46 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.048	-4.961	.35260	.06320	.04170	.04490	-.01250	-.03940	-.23610	.03560
1.055	-2.972	.38860	.06640	.04190	.04830	-.00820	-.03900	-.24610	.04770
1.062	-.975	.40650	.07030	.04190	.04190	-.00330	-.03690	-.24870	.04910
1.061	-.014	.41020	.07190	.04240	.04230	-.00220	-.03560	-.24780	.05260
1.049	1.045	.41460	.07230	.04350	.04180	-.00060	-.03340	-.24300	.05350
1.050	3.108	.41850	.07030	.04350	.04580	.00250	-.03650	-.25200	.05340
1.051	5.176	.42490	.07760	.04290	.04670	.00050	-.03360	-.25500	.04820
1.049	6.600	.43280	.09180	.02570	.04150	.00150	-.03080	-.25650	.04650
	GRADIENT	.00793	.00104	-.00072	.00033	.00168	.00049	-.00171	.000210

RUN NO. 220/ 0 RN/L = 3.01 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHRF	Q
1.202	-4.953	.35300	.06710	.02810	.09520	-.04190	-.04320	-.24790	.04150
1.204	-2.965	.38870	.07150	.02260	.09410	-.03580	-.04190	-.25800	.04240
1.203	-.981	.40830	.07700	.01720	.09420	-.03240	-.03790	-.26250	.04390
1.203	.013	.41580	.07970	.01450	.09430	-.03040	-.03460	-.26330	.04260
1.203	1.049	.42170	.08150	.01250	.09400	-.02880	-.03270	-.26470	.04150
1.202	3.107	.43160	.08370	.00950	.09510	-.02640	-.03070	-.26800	.03920
1.200	5.197	.43870	.08880	.00710	.09600	-.02460	-.03130	-.27080	.03790
1.201	6.637	.44510	.09480	.00510	.09580	-.02180	-.02890	-.27100	.03570
	GRADIENT	.00955	.00236	-.00237	-.00002	.00190	.00172	-.00234	-.000025

ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ032) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10.0000 IN.  
 BREF = 28.1304 IN. ZMRP = 11.2500 IN.  
 SCALE = 10.000 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = 10.00  
 AIRON = 10.000 BDPLAP = -11.700  
 SPDRK = 55.000 RUDDER = -25.000  
 ELEV-L = 10.000 ELEV-R = 10.000

RUN NO. 233/ 0 RN/L = 3.94 GRADIENT INTERVAL = -5.000/ 5.000

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.536	-5.038	.19750	.04250	.00650	-.01450	-.04400	-.10070	-.15520	-.02520	475.40000
.536	-3.041	.20340	.04450	.00770	-.01960	-.03930	-.10320	-.15640	-.02390	475.40000
.538	-0.947	.22070	.04640	.00650	-.01790	-.03690	-.10490	-.16160	-.02330	475.40000
.537	1.121	.22390	.04700	.00670	-.01800	-.03790	-.10660	-.16310	-.02310	475.40000
.537	1.039	.22850	.04830	.00530	-.01800	-.03830	-.10600	-.16620	-.02420	475.40000
.537	3.057	.23130	.05120	.00430	-.01980	-.04380	-.11190	-.17330	-.02580	475.40000
.537	5.046	.23330	.05450	.00530	-.01370	-.04500	-.11650	-.18150	-.02670	475.40000
.536	7.113	.24410	.05660	.00570	-.01070	-.04770	-.11690	-.18560	-.02930	475.40000
.537	9.119	.25000	.05910	.00570	-.00810	-.05320	-.12360	-.19070	-.03450	475.40000
GRADIENT		.00364	.00109	-.00048	-.00004	-.00065	-.00145	-.00265	-.00033	-.00000

RUN NO. 235/ 0 RN/L = 4.21 GRADIENT INTERVAL = -5.000/ 5.000

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.737	-5.038	.22020	.05350	.00110	-.01260	-.04160	-.11660	-.16730	-.01270	637.80000
.682	-3.041	.23700	.05540	.00050	-.00720	-.03550	-.11100	-.16880	-.00670	637.80000
.799	-0.945	.25050	.05760	.00130	-.00360	-.03560	-.11440	-.17550	-.00560	637.80000
.797	1.021	.25810	.05750	-.00160	-.00320	-.03730	-.11640	-.18220	-.00430	637.80000
.670	1.045	.26200	.05910	-.00050	-.00270	-.03180	-.11790	-.18560	-.00480	637.80000
.799	3.077	.26270	.06290	-.00010	-.00050	-.04150	-.11920	-.18940	-.00790	637.80000
.797	5.117	.26050	.06540	.00130	-.01020	-.04280	-.12130	-.19360	-.01000	637.80000
.799	7.145	.26430	.06760	.00210	-.01420	-.04810	-.12580	-.20130	-.01130	637.80000
.600	9.161	.27460	.07000	.00240	-.01480	-.04370	-.12550	-.20360	-.01540	637.80000
GRADIENT		.00435	.00116	-.00018	.00030	-.00040	-.00114	-.00353	-.00009	-.00000

RUN NO. 227/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.000/ 5.000

MACH	BETA	CHR	CHET	CHCO	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.905	-5.039	.23330	.07300	.00560	-.01090	-.04140	-.11420	-.17140	-.02360	619.10000
.902	-3.042	.23420	.07710	.00510	-.00370	-.03780	-.12170	-.17400	-.02440	619.10000
.906	-0.946	.27200	.08400	.00600	-.00330	-.03750	-.12470	-.18150	-.02150	619.10000
.901	0.018	.28020	.08630	.00630	-.00570	-.03850	-.12650	-.18650	-.02220	619.10000
.900	1.036	.28610	.08650	.00600	-.00820	-.03850	-.12730	-.19110	-.02120	619.10000
.901	3.077	.29670	.09320	.00730	-.00910	-.03920	-.12730	-.19340	-.02040	619.10000
.903	5.100	.29100	.09400	.00720	-.00460	-.03140	-.12890	-.20000	-.02000	619.10000
.902	7.144	.28520	.09470	.00830	-.01570	-.04620	-.13140	-.20580	-.02120	619.10000
.899	9.174	.28700	.09200	.00950	-.00670	-.05100	-.13000	-.21440	-.02150	619.10000
GRADIENT		.00705	.00249	.00032	.00021	-.00125	-.00195	-.00420	-.00075	-.00000





DATE 16 JUL 74

TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ552) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ. FT. WREF = 32.3010 IN.  
 LREF = 14.2440 IN. TREF = .0000 IN.  
 BREF = 24.1004 IN. ZREF = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = 10.0000 ELEVON = .0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 224 / 0 RN/L = 3.48 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.050	-5.042	.3390	.00790	-.02780	-.01990	-.00790	-.02590	-.15870	-.21490	-.05500	625.30000
1.053	-5.014	.3600	.01250	-.03020	-.01770	-.00120	-.02630	-.17370	-.22160	-.05910	625.30000
1.056	-4.983	.3820	.02070	-.03360	-.02090	.00260	-.02890	-.17980	-.22860	-.05370	625.30000
1.059	-4.922	.3890	.02370	-.03700	-.02620	.00610	-.02610	-.17950	-.23030	-.05370	625.30000
1.054	1.029	.3920	.02400	-.03990	-.02590	.00740	-.02630	-.17940	-.23240	-.05470	625.30000
1.051	3.060	.3990	.03360	-.02810	-.02540	.00940	-.02860	-.18020	-.23820	-.05380	625.30000
1.054	5.085	.3980	.03730	-.02630	-.01100	.01130	-.02880	-.17690	-.23940	-.05080	625.30000
1.051	7.115	.3970	.04060	-.02540	-.01520	.01040	-.02530	-.17230	-.23990	-.04940	625.30000
1.051	9.147	.3960	.04230	-.02590	-.01640	.00550	-.03070	-.17330	-.24800	-.04580	625.30000
GRADIENT		.00314	.00329	.00730	.00337	.00181	-.00063	-.00094	-.00265	-.00074	-.00000

RUN NO. 221 / 0 RN/L = 2.97 GRADIENT INTERVAL = -5.00 / 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
1.203	-5.037	.3600	-.00960	-.03630	-.04590	-.02220	-.01550	-.17980	-.21880	-.01440	571.60000
1.205	-5.003	.3760	-.00600	-.03740	-.04340	-.02140	-.02020	-.19100	-.23070	-.01760	571.60000
1.202	-4.990	.3820	.00120	-.03790	-.03670	-.02090	-.02780	-.19390	-.23710	-.02050	571.60000
1.199	.017	.3890	.00330	-.03780	-.03450	-.01830	-.02610	-.19440	-.23910	-.01770	571.60000
1.196	1.040	.3930	.00460	-.03720	-.03260	-.01660	-.02470	-.19510	-.23990	-.01750	571.60000
1.198	3.059	.4020	.00840	-.03720	-.02880	-.01310	-.02480	-.19610	-.24420	-.01550	571.60000
1.200	5.089	.4070	.01170	-.03620	-.02450	-.00940	-.02560	-.19560	-.24730	-.01390	571.60000
1.198	7.123	.4170	.01250	-.03430	-.02180	-.00710	-.02800	-.19850	-.25440	-.01550	571.60000
1.202	9.143	.4180	.01370	-.03420	-.02050	-.00680	-.03520	-.20010	-.26010	-.01340	571.60000
GRADIENT		.00445	.00230	.00226	.00237	.00145	.00004	-.00082	-.00214	-.00046	-.00000

ARC 11-747 QASSA B C W F W V NDM. RN/L

(BCJ053) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SJ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = 10.000 IN.  
 BREF = 26.1104 IN. ZMRP = 11.2500 IN.  
 SCALE = 10.000 SCALE

## PARAMETRIC DATA

ALPHA = 20.000 ELEV-N = 1000  
 NLRN = 1000 BDFLAP = -11.700  
 SPDRK = 55.000 RUDER = -25.000  
 ELEV-L = 1000 ELEV-R = 1000

RUN NO. 2347/0 RN/L = 3.96 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHET	CHCO	CHLL	CHUR	CHLR	CHCF
.599	-5.009	-0.0700	-0.3420	-0.0140	-0.0370	-0.0420	-0.1510	-0.0610
.597	-2.996	-0.0670	-0.3620	-0.0090	-0.0370	-0.0420	-0.1570	-0.0610
.598	-9.967	-0.0670	-0.3700	-0.0040	-0.0280	-0.0360	-0.1650	-0.0670
.595	-0.036	-0.0720	-0.3780	-0.0030	-0.0310	-0.0370	-0.1690	-0.0770
.597	1.039	-0.0660	-0.3820	-0.0020	-0.0360	-0.0360	-0.1740	-0.0690
.595	3.081	-0.0490	-0.3800	-0.0020	-0.0340	-0.0320	-0.1640	-0.0290
.595	5.105	-0.0470	-0.3690	-0.0110	-0.0250	-0.0320	-0.1460	-0.0170
.601	7.119	-0.0550	-0.3620	-0.0200	-0.0300	-0.0310	-0.2030	-0.0340
.599	9.143	-0.0780	-0.3660	-0.0440	-0.0580	-0.0260	-0.2070	-0.0730
GRADIENT	0.0572	0.0027	0.0033	0.0015	0.0067	0.0076	0.0049	0.0086

RUN NO. 2317/0 RN/L = 4.21 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHET	CHCO	CHLL	CHUR	CHLR	CHCF
.796	-5.058	-0.1680	-0.3470	-0.0150	-0.0260	-0.0440	-0.1670	-0.0720
.797	-3.004	-0.1120	-0.3130	-0.0030	-0.0370	-0.0490	-0.1730	-0.0230
.801	-9.962	-0.0760	-0.3280	-0.0230	-0.0270	-0.0670	-0.1980	-0.0230
.794	-0.034	-0.0570	-0.3500	-0.0010	-0.0280	-0.0660	-0.1960	-0.0260
.807	1.061	-0.0480	-0.3560	-0.0310	-0.0300	-0.0630	-0.2040	-0.0220
.796	3.105	-0.0210	-0.3840	-0.0620	-0.0150	-0.0610	-0.1950	-0.0250
.796	5.130	-0.0180	-0.4040	-0.0530	-0.0240	-0.0940	-0.1760	-0.0250
.800	7.181	-0.0360	-0.3840	-0.0190	-0.0270	-0.0930	-0.1590	-0.0270
.795	9.227	-0.0690	-0.3150	-0.0140	-0.0160	-0.1030	-0.1450	-0.0330
GRADIENT	0.0676	0.0014	0.0019	0.0009	0.0027	0.0069	0.0036	0.0019

RUN NO. 2287/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHP	CHET	CHCO	CHLL	CHUR	CHLR	CHCF
.800	-5.056	-0.0140	-0.3350	-0.0320	-0.0390	-0.1140	-0.1800	-0.0720
.804	-3.011	-0.0100	-0.4140	-0.0160	-0.0480	-0.1210	-0.1970	-0.0240
.803	-9.994	-0.0090	-0.3920	-0.0160	-0.0350	-0.1210	-0.2070	-0.0710
.803	-0.012	-0.0330	-0.4160	-0.0050	-0.0310	-0.2210	-0.2070	-0.0730
.801	1.045	-0.0350	-0.3990	-0.0340	-0.0110	-0.2150	-0.2050	-0.0610
.809	3.093	-0.0720	-0.4180	-0.0490	-0.0460	-0.2450	-0.1820	-0.0720
.809	5.133	-0.0140	-0.4430	-0.0560	-0.0190	-0.2530	-0.1590	-0.0690
.803	7.125	-0.0270	-0.4410	-0.0780	-0.0160	-0.2120	-0.1810	-0.0720
.801	9.217	-0.0460	-0.3950	-0.0510	-0.0330	-0.1170	-0.2060	-0.0690
GRADIENT	0.0624	0.0022	0.0009	0.0023	0.0012	0.0065	0.0017	0.0032



DATE 16 JUL 74

TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C N F W V NDM. RN/L

REF 53 ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.421 SQ.FT.    RMRP = 32.3300 IN.  
 LREF = 14.2440 IN.    RMRP = 32.3300 IN.  
 BREF = 26.1124 IN.    ZMRP = 11.2500 IN.  
 SCALE = 100.0 SCALE

ALPHA =  
 ALTITUDE =  
 SPOBSE =  
 ELEVATION =

200.00    ELEVON =  
 55.00    BDF AP =  
 1.00    JUDGE =  
 1.00    ELEVON =

## PARAMETER DATA

RUN NO. 225/0    RN/L = 3.48    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLF	CHUR	J
1.055	-5.049	.34760	-1.11710	-1.7460	-1.19190	-1.01560	-1.01720	-1.15720	-2.630	-1.240	626.5000
1.054	-5.014	.34400	-1.12250	-1.7760	-1.20010	.00720	.00550	-1.15980	-2.1170	-1.2240	626.5000
1.054	-5.961	.34150	-1.13350	-1.7690	-1.21240	.01430	.00650	-1.16120	-2.2250	-1.2030	626.5000
1.054	-6.910	.4005	-1.12730	-1.7610	-1.20640	.01670	.00340	-1.16340	-2.2370	-1.2120	626.5000
1.050	1.045	.41240	-1.12040	-1.7670	-1.19910	.02090	.00350	-1.16440	-2.355	-1.170	626.5000
1.047	3.076	.41370	-1.10950	-1.7670	-1.18820	.02230	.01640	-1.17310	-2.450	-1.1940	626.5000
1.052	5.115	.38450	-1.12130	-1.7650	-1.20160	.02670	.02400	-1.16790	-2.1190	-1.2260	626.5000
1.055	7.147	.36110	-1.12560	-1.7620	-1.20560	.03160	.01530	-1.17130	-1.7260	-1.1900	626.5000
1.054	9.193	.33830	-1.11390	-1.7660	-1.19550	.02570	.02450	-1.17640	-1.4070	-1.1240	626.5000
GRADIENT		.07620	.00257	.00015	.00242	.00256	.00338	.00215	-1.434	-1.0064	-1.0000

RUN NO. 222/0    RN/L = 2.97    GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHED	CHET	CHUL	CHLL	CHUR	CHLF	CHUR	J
1.197	-5.042	.35460	-1.13080	-1.7660	-1.20740	-1.01650	-1.02530	-1.17050	-2.610	-1.1420	570.3000
1.202	-5.019	.36730	-1.12570	-1.7690	-1.20270	-1.01250	.00190	-1.17000	-2.1170	-1.01750	570.3000
1.200	-5.990	.37000	-1.11610	-1.7660	-1.19670	-1.01940	.00110	-1.17240	-2.2790	-1.01590	570.3000
1.199	.011	.33920	-1.12570	-1.7610	-1.20670	-1.00670	.00120	-1.17520	-2.3730	-1.01300	570.3000
1.199	1.049	.40510	-1.12030	-1.7620	-1.21060	-1.02310	.00120	-1.17010	-2.4420	-1.1410	570.3000
1.196	3.076	.41110	-1.11550	-1.7610	-1.21270	.00050	.00380	-1.16720	-2.4430	-1.1340	570.3000
1.193	5.107	.38660	-1.13550	-1.7690	-1.21550	.00740	.01620	-1.17750	-2.2350	-1.1350	570.3000
1.196	7.144	.36020	-1.13700	-1.7670	-1.20970	.00980	.01630	-1.16290	-1.8470	-1.0640	570.3000
1.199	9.204	.35290	-1.12660	-1.7720	-1.20400	.01120	.01340	-1.17000	-1.6670	-1.00360	570.3000
GRADIENT		.00777	.000336	.00001	.00216	.00223	.00076	.000169	-1.362	-1.0019	-1.0000

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TABULATED SOURCE DATA - 0A53A

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ARC 11-747 0A53A B C M F W V NOM. RN/L

(0EJ055) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.7010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. YMRP = 11.2500 IN.  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVOM = .0000  
 ALLRON = .0000 BDFLAP = -11.7000  
 SPDRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 352/0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-4.933	-.03150	.05250	.02150	.07400	-.07650	-.11780	-.06700	-.09580	-.02150	479.10000
.598	-2.949	-.02490	.05500	.02230	.07720	-.07100	-.10740	-.06280	-.09080	-.02140	479.10000
.599	.027	-.00420	.05790	.02270	.08060	-.06690	-.09980	-.06640	-.09610	-.02340	479.10000
.599	3.116	.01790	.06030	.02290	.08330	-.06280	-.09490	-.07170	-.10380	-.02250	479.10000
.598	5.166	.02530	.06220	.02300	.08520	-.06610	-.09840	-.07730	-.11250	-.02320	479.10000
.599	6.848	.04300	.06330	.02340	.08660	-.05230	-.10160	-.07880	-.11820	-.02470	479.10000
GRADIENT		.00630	.00036	.00016	.00114	.00164	.00275	-.00072	-.00017	-.00018	-.00000

RUN NO. 349/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.903	-4.945	-.04710	.06950	.02830	.09780	-.08830	-.13500	-.07050	-.10570	-.00770	613.90000
.902	-2.955	-.02630	.07540	.03250	.10890	-.08110	-.12120	-.07440	-.10150	-.00380	613.90000
.897	.028	-.00600	.08250	.03400	.11650	-.07730	-.11170	-.07670	-.10630	-.00490	613.90000
.903	3.121	.01760	.08910	.03610	.12520	-.07450	-.10780	-.08270	-.11730	-.00500	613.90000
.896	5.185	.03560	.08790	.03690	.12390	-.07010	-.10910	-.08830	-.12750	-.00240	613.90000
.901	6.734	.05940	.08880	.03640	.12530	-.05240	-.10870	-.08890	-.13190	-.00240	613.90000
GRADIENT		.00783	.00236	.00089	.00325	.00161	.00325	-.00143	-.00156	.00022	.00000

RUN NO. 347/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.201	-4.944	-.06490	.06560	.02770	.09330	-.15320	-.18470	-.14480	-.13420	.04010	572.90000
1.204	-2.956	-.04220	.07010	.02230	.09250	-.15690	-.17840	-.14720	-.14580	.04610	572.90000
1.202	.028	-.00590	.07870	.01900	.09370	-.15480	-.16630	-.15340	-.16170	.04610	572.90000
1.199	3.119	.03620	.08510	.01090	.09510	-.14990	-.14670	-.15830	-.17450	.04560	572.90000
1.196	5.180	.06490	.08740	.00700	.09440	-.14280	-.13610	-.16200	-.18170	.04040	572.90000
1.200	6.708	.09400	.08950	.00510	.09450	-.12770	-.13180	-.16720	-.18640	.03700	572.90000
GRADIENT		.01254	.00247	-.00220	.00026	.00111	.00469	-.00173	-.00501	.00055	-.00000



DATE 06 JUL 74

TABULATED SOURCE DATA - 0M53A

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ARC 11-747 0A53A B C H F M V NDM, RN/L

(BEJ056) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3510 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BRP = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEWN = .000  
 AILRON = .000 BDFLAP = -11.700  
 STDRL = 55.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 350/0 RN/L = 3.73 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.034	-.05500	.07170	.00640	.07810	-.08450	-.14080	-.07270	-.09760	.02350	613.00000
.903	-3.008	-.03750	.07540	.00500	.08050	-.07800	-.12650	-.07040	-.09660	.02440	613.00000
.899	.030	-.00490	.08340	.00570	.08910	-.07190	-.10990	-.07210	-.10480	.02000	613.00000
.902	3.076	.03110	.09190	.00620	.09800	-.06900	-.10100	-.07960	-.12150	.02310	613.00000
.898	5.106	.04610	.09370	.00700	.10070	-.06990	-.10020	-.08490	-.13220	.02530	613.00000
.903	7.137	.07050	.09330	.00730	.10050	-.05110	-.09210	-.08080	-.13280	.02210	613.00000
GRADIENT		.01128	.00271	.00020	.00288	.00148	.00419	-.00151	-.00409	-.00021	.00000

DATE 06 JUL 74

TABULATED SOURCE DATA - Q453A

PAGE 390

ARC 11-747 Q453A B C M F W V NOM. RN/L

(BEJ057) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 AIRLON = .0000 BDFLAP = -11.7000  
 SPOBRK = 55.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 353/ 0 RN/L = 3.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLF	Q
.600	-5.002	-.04650	-.01200	-.03440	-.04630	-.07360	-.13640	-.06710	-.09840	483.20000
.600	-2.992	-.03710	-.00970	-.03650	-.04620	-.06780	-.12330	-.05940	-.09460	483.20000
.600	.026	-.00180	-.00890	-.03890	-.04780	-.06260	-.10860	-.06350	-.10400	483.20000
.599	3.069	.02790	-.00650	-.03870	-.04520	-.05940	-.10060	-.06790	-.12000	483.20000
.599	5.095	.03900	-.00430	-.03740	-.04170	-.06690	-.10340	-.07600	-.13320	483.20000
.599	7.120	.05590	-.00650	-.03690	-.04340	-.06500	-.10860	-.08540	-.14410	483.20000
GRADIENT		.01072	.00053	-.00036	.00017	.00139	.00374	-.00140	-.00419	-.00028

RUN NO. 351/ 0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLF	Q
.902	-5.060	-.00660	.00000	-.03670	-.03670	-.08920	-.08900	-.06750	-.10400	615.90000
.901	-3.017	-.01250	.00570	-.04420	-.03890	-.08510	-.12320	-.07450	-.12130	615.90000
.902	.034	-.00790	-.00430	-.04520	-.04950	-.07620	-.13160	-.07770	-.12210	615.90000
.899	3.101	-.00010	-.01360	-.04690	-.06050	-.07470	-.12710	-.09010	-.11150	615.90000
.905	5.143	.00320	-.01980	-.04690	-.06670	-.07040	-.11140	-.09440	-.09060	615.90000
.897	7.185	.01570	-.02010	-.04440	-.06450	-.03270	-.08680	-.08490	-.07030	615.90000
GRADIENT		.00203	-.00315	-.00044	-.00360	.00170	-.00264	-.00255	.00160	-.00021

RUN NO. 348/ 0 RN/L = 2.99 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLF	Q
1.200	-5.035	-.06730	-.12780	-.07400	-.20190	-.13990	-.12590	-.10650	-.09890	572.70000
1.203	-3.010	-.05040	-.12540	-.07800	-.20340	-.13530	-.12860	-.10870	-.10470	572.70000
1.202	.021	-.00240	-.13110	-.08170	-.21280	-.11980	-.12030	-.11850	-.11920	572.70000
1.199	3.078	.04750	-.13160	-.08190	-.21350	-.10450	-.10160	-.12890	-.12480	572.70000
1.197	5.122	.06410	-.12890	-.07970	-.20860	-.10070	-.09740	-.13730	-.12490	572.70000
1.199	7.156	.07050	-.12490	-.07810	-.20300	-.09590	-.08830	-.14440	-.11030	572.70000
GRADIENT		.01608	-.00102	-.00064	-.00166	.00506	.00444	-.00332	-.00330	-.00048

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## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C H F VI V NOM. RN/L

(BEJ058) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 26.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

ALPHA = .000  
 AILRON = .000  
 SPOBRK = 25.000  
 ELEV-L = .000

ELEVON = .000  
 BDFLAP = -11.700  
 RUDDER = -25.000  
 ELEV-R = .000

## PARAMETRIC DATA

RUN NO. 359/0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.598	-4.943	.22180	.05560	.03760	.00080	-.07360	-.11040	-.01840	479.70000
.598	-2.958	.22510	.05720	.03430	-.00210	-.07820	-.11470	-.01980	479.70000
.596	.019	.23790	.05920	.03270	-.00250	-.08300	-.12470	-.01950	479.70000
.596	3.101	.24650	.06260	.03120	-.00470	-.08720	-.13270	-.01860	479.70000
.601	5.157	.25160	.06450	.02300	-.00840	-.09260	-.14190	-.02060	479.70000
.599	6.732	.24720	.06470	.02320	-.01640	-.09800	-.14890	-.02260	479.70000
GRADIENT		.00323	.00086	-.00068	-.00061	-.00166	-.00285	.00001	-.00000

RUN NO. 356/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.901	-4.955	.24540	.07050	.02430	.00310	-.08570	-.13230	.00030	614.90000
.899	-2.975	.25740	.07810	.01870	.00210	-.09640	-.13820	-.00240	614.90000
.902	.017	.26820	.08430	.01460	-.00010	-.10570	-.14800	-.00270	614.90000
.899	3.113	.28970	.08780	.02250	-.00450	-.10960	-.16210	-.00100	614.90000
.899	5.173	.29240	.09070	.01720	-.00740	-.11390	-.16860	-.00240	614.90000
.899	6.703	.28530	.09420	.00910	-.01310	-.11700	-.17230	-.00100	614.90000
GRADIENT		.00529	.00209	-.00026	-.00093	-.00281	-.00367	.00012	.00000

RUN NO. 354/0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.200	-4.955	.38450	.06670	.01760	-.00080	-.17920	-.18850	.04210	572.70000
1.202	-2.971	.41240	.07110	.01950	.00230	-.18950	-.20110	.04280	572.70000
1.201	.011	.43080	.07900	.02070	.00300	-.19250	-.21470	.04270	572.70000
1.198	3.105	.44300	.08520	.02000	.00220	-.19530	-.22550	.03770	572.70000
1.199	5.173	.45130	.08810	.02000	.00330	-.19650	-.23150	.03490	572.70000
1.197	6.687	.45250	.09030	.01880	.00330	-.19670	-.23370	.03660	572.70000
GRADIENT		.00695	.00233	-.00029	.00032	-.00181	-.00454	.00052	.00000

ARC 11-747 0A53A B C H F M V NOM. RN/L

(BEJ059) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 ALLRON = .000 BOFLAP = -11.700  
 SPDRK = 25.000 RUDDER = -25.000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 357/0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHL	CHLL	CHUR	CHLR	CHBF	Q
.901	-5.040	.2330	.07240	.02520	-.00170	-.08630	-.12350	.02280	616.00000
.901	-5.014	.23510	.07620	.02070	-.00030	-.08810	-.12660	.02730	616.00000
.899	.023	.24380	.08410	.01060	-.00530	-.09360	-.17990	.02330	616.00000
.900	3.068	.26180	.09250	.02240	-.01360	-.09530	-.15770	.02430	616.00000
.899	5.101	.26940	.09440	.02480	-.02030	-.09830	-.16650	.02430	616.00000
.900	7.132	.26170	.09390	.01250	-.02660	-.10540	-.17030	.02210	616.00000
	GRADIENT	.00439	.00268	.00028	-.00219	-.00118	-.00511	-.00049	.00000



DATE 06 JUL 74

## TABULATED SOURCE DATA - 0453A

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ARC 11-747 0453A B C H F W V NM. RN/L

(BEJ060) ( 12 MAR 74 )

## REFERENCE DATA

SREF = 2.4210 52.1 FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 20.0000 ELEVON = .0000  
 AILERON = .0000 BOFLAP = -11.7000  
 SPDRK = 25.0000 RUDDER = -25.0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 360/ 0 RN/L = 3.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	C-CHI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.597	-5.013	.20410	-.01250	-.03100	-.04350	.02630	.00270	-.06910	-.10590	-.05750	476.50000
.599	-2.998	.21945	-.01010	-.03370	-.04380	.03080	.00810	-.06850	-.11200	-.06250	476.50000
.599	.012	.24170	-.00720	-.03680	-.04400	.03390	.00720	-.07410	-.12640	-.06160	476.50000
.597	3.058	.24580	-.00580	-.03620	-.04200	.02670	-.00250	-.07750	-.14400	-.05820	476.50000
.597	5.081	.25350	-.00420	-.03510	-.03930	.02700	-.00740	-.08080	-.15310	-.05510	476.50000
.598	7.116	.24390	-.00610	-.03490	-.04100	.00920	-.02420	-.09180	-.16720	-.06470	476.50000
GRADIENT		.00435	.00071	-.00041	.00030	-.00068	-.00175	-.00149	-.00529	.00071	.00000

RUN NO. 358/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	C-CHI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.071	.22780	-.00010	-.02870	-.02890	.02990	-.01280	-.08080	-.12990	.07600	616.30000
.900	-3.035	.27510	.00410	-.03350	-.03540	.03000	.00530	-.06910	-.15160	.07750	616.30000
.901	.017	.28070	-.00090	-.04070	-.04160	.02060	.00450	-.09580	-.16000	.07000	616.30000
.903	3.026	.27320	-.01030	-.04230	-.05270	.01860	.00280	-.10530	-.14640	.07440	616.30000
.902	5.129	.25100	-.01670	-.04310	-.05980	.01950	.00770	-.10780	-.11590	.07460	616.30000
.899	7.181	.20280	-.01820	-.04190	-.06010	.01760	.01740	-.09880	-.07500	.06450	616.30000
GRADIENT		-.00031	-.00235	-.00046	-.00283	-.00186	-.00041	-.00265	.00069	-.00050	.00000

RUN NO. 355/ 0 RN/L = 2.98 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	C-CHI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	Q
1.199	-5.041	.33150	-.13050	-.07180	-.20220	.02000	.00940	-.14940	-.15270	-.01540	573.10000
1.201	-3.020	.35210	-.12320	-.07420	-.19740	.02000	.01260	-.15420	-.16530	-.01510	573.10000
1.197	.014	.37945	-.13110	-.07850	-.20970	.02100	.00720	-.16180	-.18950	-.01120	573.10000
1.197	3.074	.38390	-.13130	-.07860	-.20990	.02000	.00530	-.16550	-.19310	-.01880	573.10000
1.198	5.111	.36630	-.12850	-.07660	-.20510	.02310	.00310	-.16570	-.17440	-.01120	573.10000
1.198	7.152	.33130	-.12460	-.07500	-.19960	.02000	.00830	-.16270	-.14020	-.00670	573.10000
GRADIENT		.00521	-.00133	-.00072	-.00205	-.00000	-.00120	-.00185	-.00456	-.00061	.00000

ARC 11-747 0453A B C M F M V NM, RN/L

(BCJ061) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = .0000 ELEVON = .0000  
 AILERON = .0000 BOFLAP = -11.700  
 SPODBK = 85.0000 RUDDER = .0000  
 ELEV-L = .0000 ELEV-R = .0000

RUN NO. 345/ 0 RN/L = 4.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	q
.599	-4.936	-.03040	.05330	.02190	.07510	-.10390	-.15430	-.09380	-.13430	-.03350	481.40000
.598	-2.945	-.01630	.05530	.02230	.07750	-.09990	-.14610	-.09590	-.13370	-.03350	481.40000
.597	.030	-.00050	.05820	.02230	.08050	-.09710	-.14150	-.09840	-.13970	-.03210	481.40000
.597	3.111	.01940	.06100	.02300	.08400	-.09500	-.13720	-.10190	-.14980	-.03200	481.40000
.598	5.168	.03230	.06310	.02300	.08620	-.09340	-.13920	-.10620	-.15870	-.03190	481.40000
.600	6.800	.05440	.06350	.02340	.08690	-.07430	-.13890	-.10680	-.16120	-.03130	481.40000
GRADIENT		.00608	.00096	.00012	.00109	.00106	.00201	-.00101	-.00200	.00022	-.00000

RUN NO. 340/ 0 RN/L = 3.75 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	q
.900	-4.947	-.04150	.07490	.03110	.10590	-.11840	-.17260	-.09680	-.15290	-.00640	605.90000
.904	-2.961	-.01760	.08450	.03410	.11870	-.11810	-.16750	-.11550	-.15240	-.01060	605.90000
.902	.028	-.00190	.08740	.03470	.12210	-.11540	-.15840	-.11510	-.15670	-.00910	605.90000
.901	3.124	.01420	.09100	.03620	.12720	-.11630	-.15870	-.11980	-.16940	-.00810	605.90000
.900	5.181	.03610	.09340	.03710	.13050	-.10030	-.15750	-.12010	-.17380	-.00660	605.90000
.900	6.718	.06740	.09380	.03750	.13130	-.07540	-.15580	-.12050	-.17910	-.00540	605.90000
GRADIENT		.00659	.00181	.00056	.00238	.00033	.00183	-.00239	-.00205	-.00009	.00000

RUN NO. 343/ 0 RN/L = 3.00 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHEI	CHEO	CHEI	CHUL	CHLL	CHUR	CHLR	CHBF	q
1.201	-4.945	-.03240	.06400	.02740	.09150	-.17980	-.23910	-.17600	-.21050	.03810	573.20000
1.201	-2.956	-.00780	.06860	.02230	.09100	-.17890	-.23330	-.18840	-.21600	.04260	573.20000
1.201	.028	.00570	.07680	.01520	.09210	-.17990	-.22800	-.18850	-.22520	.04610	573.20000
1.196	3.120	.01880	.08380	.01060	.09440	-.18020	-.22010	-.18870	-.23030	.04430	573.20000
1.204	5.178	.03980	.08610	.00610	.09210	-.17460	-.21820	-.19340	-.23930	.04010	573.20000
1.201	6.794	.07060	.08860	.00440	.09300	-.15800	-.21250	-.19750	-.24350	.03710	573.20000
GRADIENT		.00599	.00249	-.00210	.00038	-.00009	.00228	-.00129	-.00251	.00076	-.00000



DATE 06 JUL 74

## TABULATED SOURCE DATA - QAS3A

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ARC 11-747 QAS3A B C M F W V NOM. RN/L

(BEJ082) (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 32.3010 IN.  
 LREF = 14.2440 IN. YMRP = .0000 IN.  
 BREF = 28.1004 IN. ZMRP = 11.2500 IN.  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHA = 10.000 ELEVON = .000  
 AILRON = .000 BOFLAP = -11.700  
 SPDRK = 85.000 RUDDER = .000  
 ELEV-L = .000 ELEV-R = .000

RUN NO. 341/0 RN/L = 3.72 GRADIENT INTERVAL = -5.00/ 5.00

MACH	BETA	CHR	CHET	CHUL	CHLL	CHUR	CHLR	CHBF	Q
.902	-5.031	-.04600	.07590	-.11970	-.18600	-.11010	-.14960	.01710	607.20000
.900	-3.007	-.02960	.07880	-.11350	-.17390	-.11000	-.14770	.02190	607.20000
.902	.030	-.00280	.08590	-.10850	-.15870	-.10880	-.15560	.01640	607.20000
.900	3.078	.02620	.09280	-.10830	-.15020	-.11300	-.17170	.02070	607.20000
.898	5.103	.04170	.09500	-.10860	-.15270	-.11930	-.18370	.01790	607.20000
.902	7.137	.06670	.09420	-.08870	-.15070	-.11670	-.18940	.02180	607.20000
	GRADIENT	.00917	.00230	.00085	.00389	-.00049	-.00394	-.00020	.00000

ARC 11-747 0A53A B C H F W V NCM. RN/L

REF ID: A63163 (12 MAR 74)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XDRP = 32.3010 IN.  
LREF = 14.2440 IN. YDRP = .0000 IN.  
BREF = 28.1014 IN. ZDRP = 11.2500 IN.  
SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHA =	20.000	ELEVON =	.000
AILRON =	.000	BDFLAP =	-11.700
SFDBRK =	85.000	RUDDER =	.000
ELEV-L =	.000	ELEV-R =	.000

RUN NO.	346/0	RN/L = 3.99	GRADIENT INTERVAL = -5.00/ 5.00
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	BETA	CHR	CHEI	CHED	CHE7	CHUL	CHLL	CHUR	CHLR	CHF	J
MACH	.599	-.03660	-.01240	-.03340	-.04580	-.10360	-.18040	-1.0090	-1.4650	-.06920	479,70000
.599	-5.901	-.03660	-.01240	-.03340	-.04580	-.10360	-.18040	-1.0090	-1.4650	-.06920	479,70000
.599	-2.988	-.03010	-.00960	-.03640	-.04680	-.09790	-.16990	-.09320	-1.4450	-.06950	479,70000
.598	.527	.00160	-.00960	-.03780	-.04700	-.09280	-.15380	-.09440	-1.4380	-.07350	479,70000
.597	3.068	.02990	-.00660	-.03210	-.04470	-.09160	-1.4860	-.09310	-1.7100	-.06650	479,70000
.600	5.934	.03870	-.00490	-.03660	-.04150	-.09970	-1.5050	-1.1730	-1.8160	-.06650	479,70000
.598	7.120	.06670	-.00730	-.03650	-.04390	-.11440	-1.5530	-1.1440	-1.9230	-.07730	479,70000
GRADIENT		.00989	-.00728	.00422	.00104	.000351	.000036	.000036	.000438	.000036	.000036

RUN NO. 342/0 RN/L = 3.74 GRADIENT INTERVAL = -5.00/ 5.00

MACM	BETA	CHR	CHET	CHFO	CHET	CHUL	CHLL	CHUR	CHLR	CHCF	Q
.898	-5.056	.00930	.00240	-.03370	-.03130	-.11730	-.12870	-.10020	-.15510	.07410	610.40000
.903	-3.024	.00290	.00240	-.04440	-.04210	-.11330	-.16730	-.10640	-.17140	.07420	610.40000
.904	.0030	.00170	-.00360	-.04420	-.04770	-.10430	-.17950	-.10940	-.17320	.06820	610.40000
.901	3.105	.00300	-.01150	-.04520	-.05670	-.10180	-.17230	-.11940	-.15830	.06930	610.40000
.903	5.158	.00110	-.01750	-.04620	-.05150	-.09910	-.15990	-.12510	-.13270	.06840	610.40000
.900	7.188	.00750	-.02350	-.04370	-.06400	-.07830	-.13010	-.12050	-.03550	.06260	610.40000
GRADIENT		.00096	-.00227	-.00013	-.00238	-.00188	-.00091	-.00212	-.00214	-.00063	610.40000

RUN NO. 344 / (i) RN/L = 2.38 GRADIENT INTERVAL = -5.00, 5.00

WACH	BETA	CHR	CHI	CHD	CHET	CHL	CHLL	CHLR	CHLF	Q
1.200	-5.033	-0.0410	-12.810	-0.07350	-20.0170	-1.6420	-1.7410	-1.6920	-0.1400	573.200000
1.204	-3.033	-0.0640	-12.070	-0.07670	-19.9750	-1.5930	-1.6870	-1.7810	-0.1540	573.200000
1.202	.027	-0.0180	-12.420	-0.0810	-20.430	-1.5110	-1.6900	-1.7430	-0.1270	573.200000
1.199	3.002	0.0340	-13.060	-0.08360	-21.120	-1.4630	-1.7390	-1.9820	-0.1750	573.200000
1.198	5.116	0.0330	-12.840	-0.07860	-20.700	-1.4510	-1.6760	-1.7760	-0.1370	573.200000
1.203	7.157	0.0340	-12.430	-0.07620	-20.000	-1.3340	-1.5340	-1.5180	-0.1060	573.200000
GRADIENT		0.00998	-0.01162	-0.00064	-0.02225	-0.0217	-0.0319	-0.0135	-0.00735	

